Terminal Evaluation of the Project
“Implementation of the National Biosafety Framework of Mongolia”

Camillo Risoli

Evaluation Office

February 2015
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# Project Identification Table

**Project “Capacity Building for Biosafety Implementation for Mongolia”**

<table>
<thead>
<tr>
<th><strong>GEF project ID:</strong></th>
<th>4010</th>
<th><strong>IMIS number:</strong></th>
<th>GFL/2328-2716-4B95</th>
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<td>BD3 – SP6 (Biosafety)</td>
<td><strong>GEF OP #:</strong></td>
<td></td>
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<td><strong>GEF Strategic Priority/Objective:</strong></td>
<td>Environmental governance</td>
<td><strong>GEF approval date:</strong></td>
<td>06/04/2011</td>
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<td><strong>UNEP approval date:</strong></td>
<td>27/04/2011</td>
<td><strong>First Disbursement:</strong></td>
<td>15/05/2011</td>
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<tr>
<td><strong>Actual start date:</strong></td>
<td>01/05/2011</td>
<td><strong>Planned duration:</strong></td>
<td>36 months</td>
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<td><strong>Intended completion date:</strong></td>
<td>26/04/2014</td>
<td><strong>Actual or Expected completion date:</strong></td>
<td>26/04/2014</td>
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<td><strong>Project Type:</strong></td>
<td>MSP</td>
<td><strong>GEF Allocation:</strong></td>
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<td><strong>PDF GEF cost:</strong></td>
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<td><em><em>PDF co-financing</em>:</em>*</td>
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<td><strong>Expected MSP/FSP Co-financing:</strong></td>
<td>$335,000</td>
<td><strong>Total Cost:</strong></td>
<td>$714,300</td>
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<td><strong>Mid-term review/eval. (planned date):</strong></td>
<td>30/01/2013</td>
<td><strong>Terminal Evaluation (actual date):</strong></td>
<td>20-22 October 2014</td>
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<td><strong>Mid-term review/eval. (actual date):</strong></td>
<td>N/A</td>
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<td><strong>Date of last Steering Committee meeting:</strong></td>
<td>16/09/2014</td>
<td><strong>Date of last Revision:</strong></td>
<td>25/04/2014</td>
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<td><strong>Disbursement as:</strong></td>
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<td><strong>Date of financial closure:</strong></td>
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<td>$335.000</td>
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<td>$ 8,850 (UNDP)</td>
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## List of Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ANUBIS</td>
<td>UNEP Biosafety Information System</td>
</tr>
<tr>
<td>BCH</td>
<td>Biosafety Clearing House</td>
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<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CPB</td>
<td>Cartagena Protocol on Biosafety</td>
</tr>
<tr>
<td>EA</td>
<td>Expected Accomplishments (of UNEP)</td>
</tr>
<tr>
<td>EO</td>
<td>Evaluation Office (of UNEP)</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization (of UN)</td>
</tr>
<tr>
<td>GEB</td>
<td>Global Environmental Benefit</td>
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<tr>
<td>GEF</td>
<td>Global Environmental Facility</td>
</tr>
<tr>
<td>GMO</td>
<td>Genetically Modified Organism</td>
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<tr>
<td>LMO</td>
<td>Living Modified Organism</td>
</tr>
<tr>
<td>MEA</td>
<td>Multilateral Environmental Agreement</td>
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<tr>
<td>NBC</td>
<td>National Biosafety Committee</td>
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<td>NBF</td>
<td>National Biosafety Framework</td>
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<td>NBP</td>
<td>National Biosafety Programme</td>
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<tr>
<td>NCA</td>
<td>National Competent Authority</td>
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<tr>
<td>NCC</td>
<td>National Coordinating Committee</td>
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<tr>
<td>NEA</td>
<td>National Executing Agency</td>
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<tr>
<td>NPC</td>
<td>National Project Coordinator</td>
</tr>
<tr>
<td>MEA</td>
<td>Multilateral Environmental Agreement</td>
</tr>
<tr>
<td>MEGD</td>
<td>Ministry of Environment and Green Development</td>
</tr>
<tr>
<td>MNET</td>
<td>Ministry of Nature, Environment and Tourism</td>
</tr>
<tr>
<td>MTS</td>
<td>Medium Term Strategies (of UNEP)</td>
</tr>
<tr>
<td>PIR</td>
<td>Project Implementation Review</td>
</tr>
<tr>
<td>PoW</td>
<td>Programme of Work (of UNEP)</td>
</tr>
<tr>
<td>ProDoc</td>
<td>Project Document</td>
</tr>
<tr>
<td>RA</td>
<td>Risk Assessment</td>
</tr>
<tr>
<td>RM</td>
<td>Risk Management</td>
</tr>
<tr>
<td>RoI</td>
<td>Review of Outcomes to Impact</td>
</tr>
<tr>
<td>TOC</td>
<td>Theory Of Change</td>
</tr>
<tr>
<td>TOR</td>
<td>Terms Of Reference</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environmental Programme</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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Executive Summary

1. This is the final report of the Terminal Evaluation of the Project “Capacity Building for Biosafety Implementation for Mongolia” (GFL/2328-2716-4B95). The Project was approved in 04/2011 for a duration of 3 years (2011-14) and a total budget of USD 714.300, 53% of which represents the GEF allocation (USD 379.300), while the remaining 47% (USD 335.000) was provided by the Government of Mongolia. The Evaluation took place in the period between September 2014 and January 2015 and included a mission to Mongolia from 20/10/2014 to 22/10/2014.

2. The project was conceived to support the country to adopt and operationalise essential regulations, procedures and mechanisms to make the Law on LMOs workable and consistent with country’s needs and international obligations. Particular emphasis was given to capacity building aspects. The MEGD (Ministry of Environment and Green Development), institutional “home” of the CPB National Focal Point and of the BCH, is also the National Competent Authority and was the National Executing Agency of the Project.

3. The Project has successfully supported the country in enhancing the national capacities to implement the National Biosafety Frameworks (NBF). Building upon the National Biosafety Law of 2007, the Project has largely contributed to the elaboration of five Regulations (General Regulations and specific Regulation on Inspection, Customs, Registration & Risk Assessment, Transportation), two of which already approved (Inspection and Customs) and three other at the final stage of their process of approval. These are remarkable results when considering the low level of awareness and information on Biosafety in the country, more specifically among the decision-makers, at the beginning of the Project.

4. The Project has developed a wide range of activities of awareness raising and information at different levels of Mongolian society and this strategy has proved successful in creating interest and stimulating responses among the general public, the academic world, the governmental institutions and the policy-makers. Consciousness and trust have progressively increased and a favourable socio-political and institutional environment has been steadily built. The National Biosafety Committee (NBC) created by the Biosafety Law is currently a quite solid body, made operational and effective through a permanent and dynamic Secretariat constituted at MEGD that also liaises with the Secretariat of the Cartagena Protocol.

5. Several realisations in terms of institution and capacity building make part of the project achievements: a considerable number of human resources have been exposed to or trained on Biosafety issues, guidelines and manuals have been produced, a GMO’s detection laboratory has been established. In sum, the conditions for the socio-political and institutional sustainability of the Biosafety agenda in the country have been created and the country ownership on the process is undeniable.

6. Many efforts have been deployed for the elaboration and approval of the National Biosafety Programme (NBP), considered the pivotal instrument for the implementation of all programs and activities concerning Biosafety in the country. The NBP is a comprehensive instrument of public planning including Work plans (2014-2017, 2018-2021), Monitoring & Evaluation framework and a Budget. After its approval by MEGD, the Programme is formally included in the National Plan and is allocated a budget. This is, of course, a substantive point that enables institutional and financial sustainability.

7. Nevertheless, the future development of the Biosafety agenda in the country is not without challenges. The NBP is just beginning the operationalization of the Biosafety systems: inspection and
detection systems must be made fully functional at decentralised and central level and combined with an efficient referral system, applications will have to be processed timely and rigorously, risk assessment and risk management implemented with sound technical advices and procedures.

8 Notwithstanding the coordinating role of the NBC and its Secretariat, the institutional framework of Biosafety in Mongolia is not a simple one, contemplating different actors in separate institutions (e.g. MEGD, the National Inspection Agency, Customs, etc.): decision-making and administrative procedures will have to be harmonized and fine-tuned. Risk Assessment and Risk Management are admittedly in need of increased capacity building, through more targeted training and coaching of the key human resources in charge of it. Outreach activities leading to a more meaningful and inclusive participation in decision-making of new actors from Civil Society and Private sectors need to be pursued, too.

9 Financial sustainability, though presumably benefiting from a guaranteed public budget, will be quite surely in need of extra-budgetary sources to cope with capacity building activities, laboratory upgrading, outreach activities. For that, new alliances and partnerships have to be built, both internally and externally and, in this perspective, a regional approach to problem-solving and to capacity building could be highly appropriate. Cost-effectiveness could also improve from increased coordination and interaction between UN agencies and programmes in the sectors of Food Safety and Food Security, Bio-diversity and Genetic Resources, Public Health, as well as with different Multilateral Environmental Agreements (e.g. Codex Alimentarius, Nagoya Protocol on Access and Benefit Sharing of Genetic Resources, the International Treaty on Plant Genetic Resources for Food and Agriculture).

10 As requested by the TOR, twenty-two different evaluation criteria have been rated\(^1\), as shown in the Table of Chapter 5.1 of the Report (Conclusions). As a whole, the Project can be rated as Satisfactory (S). The summary assessment and the rating of some of the main evaluation criteria are synthetized here below:

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Summary Assessment</th>
<th>Rating</th>
</tr>
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<tbody>
<tr>
<td>A. Strategic relevance</td>
<td>The Project confirms all its relevance in addressing challenging and crucial issues and needs in the area of biodiversity’s sustainable use, in achieving internationally agreed environmental objectives and goals and in contributing to fulfill UNEP’s mandate and policy, as well as GEF priorities and strategies. (see 4.1)</td>
<td>S</td>
</tr>
<tr>
<td>B. Achievement of outputs</td>
<td>The Project has satisfactorily delivered the expected outputs. (see 4.2 and Table 1)</td>
<td>HS</td>
</tr>
<tr>
<td>C. Effectiveness: Attainment of project objectives and results</td>
<td>Project Outcomes have been achieved at a variable extent, but always satisfactorily, allowing the attainment of the main Project Outcome “A National Biosafety Framework (NBF) established and operational through a National Biosafety Program (NBP) that includes a multiannual Work Plan and Budget” (see 4.3.2)</td>
<td>S</td>
</tr>
<tr>
<td>D. Sustainability and replication</td>
<td>The Project has taken substantive steps in putting forward the Biosafety Agenda in the country at different levels and with a range of national partners, hence creating a favourable socio-political environment (see 4.4.1). Biosafety Governance put in place looks presently robust, particularly the NCA (MEGD), the NBC and the structured cooperation with some key-stakeholders (see 4.4.3). Overall, Sustainability is likely to occur, but Financial Sustainability</td>
<td>ML</td>
</tr>
</tbody>
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1. Using a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability is rated from Highly Likely (HL) down to Highly Unlikely (HU).
Two main lessons can be learned from the Project: a) the setting of a permanent Secretariat of the NBC within the MEGD is an interesting institutional approach that combines a higher degree of autonomy and decision-making (when compared with a ministerial department) and the advantages of being inserted within a Ministry (institutional anchorage), which is also the NCA; b) projects can be highly cost-effective when institutional uptake and stakeholders’ participation and cooperation are high.

The evaluation mission’s has presented two main recommendations:

Recommendation 1: to UNEP, NCA (MEGD), NBC

**Recommendation 1:**
In order to consolidate the positive achievements obtained so far and considering the challenges of the implementation of the National Biosafety Programme, it is recommended to give continuity to GEF/UNEP assistance, namely through:

a) Technical and methodological support of UNEP to the NBC Secretariat, particularly through coaching and targeted trainings;

b) Training needs assessment and targeted, intensive training to key human resources responsible for and/or directly involved in Risk Assessment and Monitoring;

c) Preparation, in collaboration with the National University, School of Agriculture, of a Biosafety Curriculum to improve capacities of the Inspectors of the National Agency for Specialised Inspection (nearly 2,000 Inspectors throughout the country);

d) Analysing the existing (in-country) University courses and curricula of disciplines related to Environmental Management, including Environmental Risk Assessment, Environmental Impact, Socio-Economic Impact, Risk Monitoring, Risk Communication, Environmental Law and Policy, in order to assess the possibility of integrating Biosafety issues in those curricula.

Recommendation 2: to NBC and UNEP

**Recommendation 2:**
In order to improve financial and institutional sustainability, it is recommended that:

a) the NBC Secretariat approaches and builds and/or consolidates partnerships at national level with bilateral and multilateral agencies to jointly explore possibilities of cooperation on Biosafety related initiatives and projects, with particular reference to the UN agencies and programmes active in the sectors of Food Safety and Food Security, Bio-diversity and Genetic Resources, Public Health, the joint UN initiative PAGE, in the framework of Multilateral Environmental Agreements, such as *Codex Alimentarius*, Nagoya Protocol on Access and Benefit Sharing of Genetic Resources, the International Treaty on Plant Genetic Resources for Food and Agriculture, among others;

b) the NBC Secretariat approaches and builds and/or consolidates partnerships at regional level with Universities, Research Centres and Institutes in the area of training and capacity building, technical assistance on Risk Assessment and Risk Monitoring, support to LMOs detection in laboratory;

c) the NBC Secretariat and UNEP explore the possibility of implementing regional cooperation among NCAs of different countries in order to share costs and services in specific areas, as well as enhancing information sharing among the Asia-Pacific Regional Network.
1 Introduction

1. In its capacity as an Implementing Agency of the Global Environmental Facility (GEF), UNEP has been providing administrative and technical assistance to countries participating in the Cartagena Protocol on Biosafety (CPB) for the development and implementation of National Biosafety Frameworks (NBF). The frameworks are a combination of policy, legal, administrative and technical instruments enabling the countries to manage the safe transfer, handling and use of living modified organisms (LMOs) from modern biotechnology.

2. This is the final report of the Terminal Evaluation of the Project “Capacity Building for Biosafety Implementation for Mongolia” (GFL/2328-2716-4B95). The Project was approved in 04/2011 for a duration of 3 years (2011-14) and a total budget of USD 714.300, 53% of which represents the GEF allocation (USD 379.300), while the remaining 47% (USD 335.000) is provided by the Government of Mongolia.

3. The Evaluation took place in the period between September and November 2014 and included a mission to Mongolia from 20/10/2014 to 22/10/2014. The Evaluation Team consisted of one consultant specialist of projects evaluation in the environmental sector (See Annex 6) working under the methodological guidance of the Evaluation Office (EO) of UNEP.

2 The Evaluation

4. In line with the UNEP Evaluation Policy and Evaluation Manual and following the Guidelines for GEF Agencies on Conducting Terminal Evaluations, the Terminal Evaluation has been undertaken upon completion of the Project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation had two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the GEF and their executing partners – the National Executing Agency (Ministry of Environment and Green Development, MEGD) and the national partners.

5. According to the UNEP evaluation methodology, most criteria have been rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability is rated from Highly Likely (HL) down to Highly Unlikely (HU).

6. As requested by the UNEP’s methodology for Terminal Evaluations, an Inception Report was produced at the beginning of the mission, containing a review of the project context, of project design quality, a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule.

7. According to the TOR received, a participatory approach has been used since the preparation of the field mission, through a preliminary exchange of evaluation tools with the National Project Coordinator and the joint preparation of the agenda for the country visit. Once fielded, the mission, despite time

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2 In this Report, the terms LMO (Living Modified Organism) and GMO (Genetically Modified Organism) are considered synonymous and indifferently used.
limitations, provided the opportunity to meet with relevant stakeholders and to collect and discuss first-hand information, opinions and suggestions or recommendations.

8. Quantitative and qualitative methods and indicators have been used, taking into account that the Project was expected to mostly deliver institutional and capacity building outputs and outcomes. Being so, quantitative outputs were also assessed against their quality and effectiveness, particularly their capacity to drive and sustain changes at higher level of objectives.

9. As far as possible, the information received has been triangulated among the stakeholders and with the existing written reports available in the ANUBIS platform. Triangulation, especially interviews with project managers, partner institutions, trainers and trainees, has been particularly useful in assessing training effectiveness. A joint meeting involving different stakeholders was also held, trying to capture the highest number possible of opinions and concerns during the limited timeframe of the country-visit.

10. The main methods and tools used in the Evaluation have been:
   • The Desk Review of all project documents and tools the consultant has access to (see Annex 4), including the ANUBIS platform.
   • Exchanges with the Project Management Team at UNEP, namely the Task Manager and the Fund Management Officers.
   • The Country Visit. The interviews during the country visit included the Secretariat and members of the National Biosafety Committee (NBC), the National Executing Agency (NEA), national stakeholders such as CPB and GEF Focal Points, CBP Focal Point, representatives of Ministries and National Agencies, national consultants of the Project, National laboratories involved in GMO detection, Civil Society representatives and representatives of academic and research institutions.

11. Some months having elapsed since the end of the Project (April 2014), the National Project Coordinator was out of the country during the country visit. This limitation has been overcome through email exchanges. Due to budget constraints, the time available for the country visit has been quite short (3 days). The succession, back to back, of three different terminal evaluations of analogous projects in three countries (Mongolia, Lao PDR, Bhutan) has permitted some interesting comparison and was obviously more resource efficient (time and travel costs).

3  The Project

3.1  Context

12. With its severe, semi-arid weather and an average height of 1580 meters above sea level, Mongolia conserves, among its mountains and steppes, unspoiled environments and high endemism of genetic resources. The Mongolian economy is still highly dependent upon agriculture (wheat, potato), animal husbandry and natural biomass resources (steppes and forests) and there is a risk that wild habitats continue to be lost due to the expanding low-yield agriculture into marginal habitats important for biodiversity. The safe use of modern biotechnology may have the potential to mitigate these trends, by ensuring that any novel agricultural products introduced to the farming system could maintain or increase yield without expanding agriculture into wild areas. Nevertheless, accidental or intentional

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3 See list of people met in Annex 3
introduction of some products of modern biotechnology could, in theory, lead to the erosion of wild or traditional agricultural biodiversity through gene flow.

13. The Mongolian government is committed to protect its natural heritage and the project has been conceived to assist in the conservation and sustainable use of the vast national biodiversity, natural environment and unspoiled ecosystem. As a matter of fact, from 2002-2005, Mongolia successfully completed a draft National Biosafety Network (NBF) under the UNEP/GEF funded global project on “Development of National Biosafety Frameworks”. The draft NBF formed the basis of a new law, which was enacted in November 2007. The Ministry of Nature, Environment and Tourism (MNET), now Ministry of Environment and Green development (MEGD), also collaborated with UNEP/GEF in the “Capacity Building in Biosafety Clearing House” (BCH) project (Feb 2007-June 2008).

14. The current project was conceived to support the country to adopt and operationalise essential regulations, procedures and mechanisms to make the Law on LMOs workable and consistent with country’s needs and international obligations. Particular emphasis was given to capacity building aspects. The MNET (now MEGD), institutional “home” of the CPB National Focal Point and of the BCH, was also identified as the National Competent Authority and the National Executing Agency of the Project.

3.2 Objectives and components

15. According to the ProDoc (Project Document), the Project aimed “To establish and operationalise Mongolia’s National Biosafety Framework, and to assist Mongolia to comply with its obligations as a Party to the Cartagena Protocol on Biosafety so as to be able to undertake safe use of modern biotechnology for sustainable development”. The Project was conceived with six (6) components:

1. Policy and legal aspects for development of a National Biosafety Program;
2. Capacity building in human resource for implementation of a Biosafety Program;
3. Capacity strengthening at institutions for implementation of a Biosafety Program;
4. Public awareness and public participation in matters related to Living Modified Organisms;
5. Establishment of a National and Regional networking system for Biosafety;
6. Project audit, Monitoring and Evaluation cost.

3.3 Target areas/groups

16. The Project is essentially an Institutional & Capacity Building Project aiming at strengthening national capacities to fulfil the national and international obligations of the Cartagena Protocol on Biosafety (CPB). Main target groups are the national institutions involved in the implementation of the NBF, particularly the former (MNET) and the current (MEGD) National Competent Authority (NCA) and the other national institutions participating in the National Biosafety Committee (NBC). A large programme of capacity building has targeted the national human resources that have the responsibility of decision-making and policy making, detection and inspection tasks, risk assessment and risk monitoring.

3.4 Milestones/key dates in project design and implementation

17. The Project has been approved by GEF on the 06/04/2011 and by UNEP on the 27/04/2011, for a duration of 36 months (3 years). The first disbursement occurred the 15/05/2011. The expected completion date has been respected and the Project has come to end the on 26/04/2014.
3.5 Implementation arrangements

18. The National Executing Agency (NEA) is the Min. of Environment and Green Development (MEGD), which is also the focal point to the CPB and the National Competent Authority (NCA).

19. The National Biosafety Committee (NBC), defined in the National Law “National Committee on Biosafety”, has been established by the National Competent Authority (NCA) to advise and guide the implementation of the National Biosafety Framework. The committee includes representations of all government agencies with mandates relevant to the Cartagena Protocol on Biosafety and representations from the private and public sectors. The National Coordinating Committee is the legal body to issue higher decision, but it is not a daily operational body. Therefore, in order to fulfill the gap for the management of the project, a National Project Director (not paid from GEF resources) has been appointed by the Head of the National Executing Agency to oversee project management.

20. The National Project Coordinator (NPC) was appointed by the National Executing Agency, after dialogue with UNEP, for the duration of the project. The NPC was responsible for coordination, management and the general supervision of all the aspects of the national project. He reported to the National Project Director, the NEA and UNEP. He has been responsible for all substantive, managerial and financial reports from the national project and has provided overall supervision of the project team, consisted of a financial assistant and “ad hoc” local consultants. Progress in implementation has been monitored against the work plan, the half yearly project progress reports and quarterly expenditure reports.

3.6 Project financing

21. The Project had an estimated cost of USD 714.300, the 53% of which was represented by the GEF allocation (USD 379.300), while the remaining 47% (USD 335.000) was provided by the Government of Mongolia, in kind. No other sources of funding were foreseen.

3.7 Project partners

22. Beside the main Project Partner (MEGD), other Ministries have been involved, such as the Ministry of Health, the Ministry of Food, Agriculture and Light Industry and the Ministry of Education, Culture and Science. National Agencies like the General Customs Office and the General Agency for Specialized Inspection are key-players in monitoring the transfer and pass of LMOs in the territory of Mongolia, in organizing the enforcement of Regulations regarding LMOs and in implementing inspections.

23. The Scientific community and the Universities have been actively participating through technical support on risk assessment and risk management, the development of regulations and procedural manuals, as well as in the implementation of the GMO Laboratory.

3.8 Changes in design during implementation

24. The Project did not undertake any major change in Project Design during the implementation, except normal budget revisions that did not alter the content of the activities and results.

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4 Also defined in some documents as “National Coordinating Committee”
3.9 Reconstructed Theory Of Change of the project

25. In the Inception Report of the mission\(^5\), the consultant presented a reconstructed Theory Of Change (TOC) of the Project, based on the project design, other UNEP-GEF Biosafety Unit documents and the comments received from UNEP Evaluation Office. As a result, the mapping of the possible pathway of change from the project's outputs to the expected outcomes, up to the intended impact, was produced. The reconstructed TOC has been a valuable instrument of analysis all along the evaluation exercise and its design has been tested and revised by the consultant during the evaluation. It has particularly contributed to assess the effectiveness and the sustainability of the project’s results, as well as the likeliness to achieve the intended impact, as discussed in Chapter 4.3 (Effectiveness) of this report.

26. As mentioned above (see 3.2), the project’s objective is “To establish and operationalise Mongolia’s National Biosafety Framework, and to assist Mongolia to comply with its obligations as a Party to the Cartagena Protocol on Biosafety so as to be able to undertake safe use of modern biotechnology for sustainable development”. Therefore, “A National Biosafety Framework (NBF) established and operational” can be considered as the main Project Outcome\(^6\) to be achieved.

27. The National Biosafety Framework (NBF) is a comprehensive institutional instrument that guides the country towards the achievement of the objective of the Cartagena Protocol on Biosafety (CPB), as stated in the art. 1 of the Protocol\(^7\), and eventually towards the Global Environmental Benefit (GEB) representing the Intended Project Impact: the “Enhanced conservation and sustainable use of biological diversity in Mongolia”.

28. The exercise of reconstruction of the Theory Of Change has permitted to streamline the Results Framework of the Project avoiding duplications or overlapping and overcoming existing inconsistencies. As a result, four (4) clusters of Outputs\(^8\) have been assembled and four Direct Outcomes have been identified. Chapter 4.3.2 and Diagram 1 describe and illustrate the causal logic of the Project from Outputs to Outcome.

29. The TOC also depicts the pathway from Outcomes to Impact and any intermediate change required between them, called intermediate states. It permits to appreciate to what extent the project has to date contributed, and is likely in the future to further contribute, to changes in stakeholders' behaviour as a result of the project’s direct outcomes, and the likelihood of those changes in turn leading to environmental benefits (impact). The pathway is described and discussed in chapter 4.3.3 and Diagram 2. The TOC further defines the external factors that influence change along the pathways, called drivers (when the project has a certain level of control) or assumptions (when the project has no control).

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\(^5\) Inception Report of the Terminal Evaluation of the Project “Capacity Building for Biosafety Implementation for Mongolia”. C. Risoli, September 2014

\(^6\) Outcomes: the short to medium term behavioural or systemic effects that the project makes a contribution towards, and that are designed to help achieve the project’s impacts (“the ROTI Handbook”, GEF, 2009)

\(^7\) Art. 1 of CPB: “Adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements”.

\(^8\) Outputs: the goods and services that the project must deliver in order to achieve the project outcomes (“the ROTI Handbook”, GEF, 2009)
4 Evaluation Findings

4.1 Strategic relevance

4.1.1 Sub-regional environmental issues and needs

30. Concerns are rising about food and livelihood security throughout Asia, currently home to nearly 60% of the world’s population. After a spectacular rise during 1970s and 1980s, the region has experienced a slow down or even stagnation in food production during recent years. Several countries are increasingly resorting to imports either because domestic production is too low or because there are growing demands for food and feed grain. Actually, it is predicted that countries in Asia will account for half of the increase in global demand for the cereals by the year 2020.

31. Mongolia imports almost 70% of its food, as well as seeds for agriculture (e.g. wheat) and there is a growing concern, particularly in urban settings like the capital city Ulaan Batar, about the quality of the imported food, mainly from China and USA as it does not often display accurate labelling standards. On the other side, there is an obvious, increasing interest, both in Governments and among commercial and traditional farmers, for the use of biotechnology to improve agricultural productivity. Progress in Biotechnology Agriculture of neighboring countries, particularly Japan and South Korea, is followed with interest in Mongolia and is raising expectations. The intensification of agriculture in appropriate areas could actually limit the expansion of agricultural activity in areas designated for environmental conservation. The country would definitely like to improve the status of its national research and technological capacity, so as to be up to the challenge on this respect.

32. In spite of the productive benefits from GM crops, there are also legitimate concerns about the likely risks to the pristine environment of the country and to human and animal health (almost 30% of the population is breeding livestock through a nomadic, totally traditional and organic form of animal husbandry). Specific concerns associated with transgene flow include erosion of genetic diversity in wild relatives of crop plants.

4.1.2 UNEP mandate and policies

33. UNEP has a rich history of assisting governments in advancing national and regional implementation of environmental objectives, enhancing global and regional environmental cooperation, as well as developing and applying national and international environmental law. Biosafety has become an increasingly relevant sector of UNEP intervention since the first group of Pilot Biosafety Enabling Projects started in 1997 in 18 countries. From 2000 onward, UNEP has supported around 140 countries to develop and implement their National Biosafety Framework (NBF) and/or to participate and benefit from the Biosafety Clearing House (BCH).

34. At the time of Project design, Biosafety was one of the main areas where UNEP was playing its strategic role of Implementing Agency of the Global Environmental Facility (GEF). However, biosafety was not formally and explicitly recognized as thematic priority in any of UNEP’s instruments of strategic planning that were, in those years, also in a phase of progressive restructuring. On this regard, it has to be observed that Biosafety, as such, is not mentioned in any of UNEP’s Expected Accomplishments (EA) of its more recent Medium Term Strategies (MTS). It only comes to appear in the biennial PoW for 2012–2013 as one of the five potential areas mentioned in one of the Outputs of the Sub-Programme Environmental Governance.
35. All the same, the relevance of Biosafety can be reconstructed through its evident insertion in some EAs of two strategic cross-cutting areas of UNEP’s intervention: Ecosystem Management and Environmental Governance, as widely discussed in Chapter 4.7 (Complementarity). Moreover, the Project is absolutely instrumental to the achievement of the five strategic objectives of the Strategic Plan for the Cartagena Protocol on Biosafety for the Period 2011-2020: 1. Facilitating the establishment and further development of effective biosafety systems for the implementation of the Protocol; 2. Capacity-building; 3. Compliance and review; 4. Information sharing; 5. Outreach and cooperation.

36. The Project presents a regional dimension, as clearly expressed by one of its expected outcomes. Therefore, it makes part of UNEP’s regional and sub-regional support for the coordination of regional strategies on Access and Benefit Sharing (ABS), National Reporting, and Liability & Redress, hence contributing to the reform of the International Environmental Governance addressing the complex and fractured system of MEAs, including the biodiversity-related MEAs.

4.1.3 GEF Biodiversity focal area, strategic priorities and operational programme(s)

37. As the financial mechanism of the Convention on Biological Diversity (CBD), the Global Environment Facility (GEF) is also called upon under the Biosafety Protocol to serve as its financial mechanism. At its meeting in November 2000, the GEF adopted the “Initial Strategy for Assisting Countries to Prepare for the Entry into Force of the Cartagena Protocol on Biosafety”, the main objectives of which are: to assist countries in the establishment of national biosafety frameworks; to promote information sharing and collaboration (in particular at the regional and sub-regional level); and, to promote collaboration with other organisations to assist in capacity building for the Protocol.

38. The Strategy for Financing Biosafety was approved by the GEF Council on an interim basis in December 2006 and became part of the GEF Focal Area Strategies and Strategic Programming for GEF-4 approved by the GEF Council in June 2007. Under GEF-5, the strategy for the Biodiversity Focal Area contemplates as its Objective 3: “Build Capacity for the Implementation of the Cartagena Protocol on Biosafety (CPB)”. To achieve this Objective, a comprehensive Projects Support structure has been established, including three types of Projects: Single-country project, Regional or sub-regional projects, Thematic projects.

39. The Project under current evaluation is therefore strategically relevant to GEF priorities. According to data displayed in GEF web site, the Biodiversity portfolio (including Biosafety) represented in 2013 almost 40% of the GEF Portfolio in Mongolia. According to information received during the country visit, the allocation in GEF 6 will further increase the current portfolio by 20%, and Biosafety will be a substantive part of the Biodiversity area.

4.1.4 Overall Strategic Relevance

40. As discussed above, the Project, in retrospect, confirms all its relevance in addressing challenging and crucial issues and needs in the area of biodiversity’s sustainable use in the country and the region, in achieving internationally agreed environmental objectives and goals, in compliance with country’s obligations towards Cartagena Biosafety Protocol, and in contributing to fulfil UNEP’s mandate and policy, as well as GEF priorities and strategies. As a whole, the strategic Relevance of the Project can be rated as S (Satisfactory).
4.2 Achievement of outputs

41. The Evaluation has assessed the delivery of Project Outputs against the planned Outputs of the Results Framework (App. 4 of the ProDoc), in close collaboration with the National Project Coordinator and the Team of the Secretariat of the National Biosafety Committee (NBC). The revision of the outputs produced (e.g. trainings report, training material, awareness material, etc.), their good level of systematisation and filing (also in ANUBIS), as well as the many interviews with different stakeholders have permitted to confirm the quality of the outputs and the participatory process of their production.

42. Table 1, produced by the National Project Coordinator\(^9\) and widely discussed and revised during the country visit with the NBC Secretariat, synthetises the main findings on Outputs delivery, under each of the expected Outcomes presented in the Results Framework. As clearly showed by the Table, the Project has satisfactorily delivered the expected outputs. We highlight:

- the preparation and approval (by MEGD) of the National Biosafety Programme with Work Plans;
- the approval of two relevant Regulations and the preparation of other three, ready for approval;
- two relevant Guidelines published (for Inspections and for Customs);
- GMO laboratory in place and laboratory national standards and biosafety rules approved;
- Officers, inspectors and laboratory staff trained in GMO detection, Risk Assessment and Monitoring;
- A number of information and awareness raising material produced and disseminated.

43. It is widely recognized that the main key-drivers have been the high dedication of the team, the strong institutional support of the NCA (MEGD) and the commitment of all the members of the NBC, which, in sum, have created a favorable environment for the setting and implementation of the Biosafety Agenda in the country. The Evaluation rates the achievement of Outputs as **Highly Satisfactory** (HS).

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\(^9\) Based on a format that the Consultant had shared with the team of the Project before the country visit
| Objective / Outcome 1: A fully functional and responsive regulatory regime on Biosafety in line with Cartagena Protocol |
|---|---|---|---|---|
| **Expected Outputs**<sup>10</sup> | **Indicators**<sup>11</sup> | **Outputs delivered by the Project (October 2014)** | **Evidence** | **Comments** |
| 1.1) An analysis of what implementing regulations are needed to make the Law on LMO (2007) operational. | By end of 2012, review of policy and legal framework to implement Law on LMOs complete | - Collection and review of policy & legal framework were done and timely completed by experts, NBC & stakeholders, project team. | - NBC meetings protocols, - Reports of several workshops organized in 2011, - Progress reports | A thorough work of collection and analysis was done with related Government agencies, Ministries and within the National Biosafety Committee |
| 1.2) Regulations to implement the Law on LMOs are developed and linked to environmental governance. | By end of 2012, necessary regulations developed and approved | - Two main regulations (Inspection Regulations and Customs Regulations) have been produced and approved. - the General regulation for implementation of Law on LMOs is finalized and has been delivered to the Cabinet Secretariat of Government of Mongolia for approval; - Registration & Risk assessment Regulation on food and products derived from LMOs are ongoing for approval at the Ministry level. - Draft of Transportation | - Regulations in place - Drafts produced - NBC Meetings protocols - Progress reports | Pending Regulations should be approved hopefully even this year or early next year |

<sup>10</sup> As stated in the Results Framework (App. 4) of the Project Document

<sup>11</sup> As stated in the Results Framework (App. 4) of the Project Document
| 1.3) Biosafety Program is developed and integrated into the Environmental Framework Law and NBF within national strategies | By end of 2013, National Biosafety Program developed and get approved | - The National Biosafety Program (NBP) with its implementation plan is finalized. It has been discussed and accepted by the MEGD and delivered to the Cabinet Secretariat of Government of Mongolia for approval. - Newly reshaped Food Law & new Food Safety Law have in several articles issues on LMOs derived food & feed. | - Document of NBP with its implementation plan is available (currently only in Mongolian, translation is foreseen) - Food Law and Food Safety Law (2012) |

**Objective / Outcome 2:** Mongolia’s Implementation Mechanism for Biosafety Program established at the administrative level

| 2.1) Decision makers and Officers trained in administrative aspects of Biosafety implementation, including risk assessment and risk management, decision making and risk communication. | By 2014 all the trainings are completed | - All foreseen trainings were completed (approx. 30 workshop /trainings/meetings), including two training programs on Cartagena protocol and on Biosafety Clearing House (www.bch1.mn). | - Reports of training and workshops on Anubis Because of their duration (1-3 days) and the heterogeneity of the participants, training activities should be considered more as awareness raising events and introductory sessions. |

<p>| 2.2) Technical manuals on decision making procedure prepared | By end of 2012 “Technical Manual on Decision making Procedure” published | - Two relevant Guidelines “Technical Manual on Decision making Procedures” has been produced, reviewed, published &amp; disseminated: one for the Inspectors of the General - Guidelines uploaded in Anubis under technical documents - Printed technical manuals, - Developed training materials - <a href="http://www.bch1.mn">www.bch1.mn</a> | Quality not assessed for obvious reasons (language), but generally well appreciated by the users, according to interviews |</p>
<table>
<thead>
<tr>
<th>Objective / Outcome 3: Key professional institutions and experts sufficiently strengthened for implementation of Biosafety Program</th>
<th><strong>2.3) Enforcement and monitoring officials trained</strong></th>
<th>By 2014, all training completed</th>
<th>Agency for Specialized Inspection and the other for the General Customs Officer - Biotechnological laboratory national standards and laboratory biosafety rules are finalized, approved, published &amp; disseminated.</th>
<th>- Inspection Officers and Customs Officers received at least one initial, introductory training (also one training in a border office)</th>
<th>- Report of the first national LMO detection and verification, Risk Assessment and risk management training organized in October 2012 (in Anubis).</th>
<th>The Consultant held meetings with trained Inspection and Customs Officers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.1) Key professional institutions identified and strengthened</strong></td>
<td>By 1st quarter of 2012, Report on key institutions with their current capacity and staff training needs particularly on LMO detection</td>
<td>Identification of key institutions with their current capacity and staff training needs particularly on LMO detection were made by NBC</td>
<td></td>
<td></td>
<td>A working group was established by MEGD (then MNET)</td>
<td></td>
</tr>
<tr>
<td><strong>3.2) Reference laboratory strengthened</strong></td>
<td>LMO detection lab will be established by end of 2011.</td>
<td>- LMO detection laboratory has been established in the Institute of Biology, Mongolian Academy of Science. However, the Lab is not yet formally recognized as Reference Laboratory</td>
<td>- Laboratory upgraded with PCR machine and other equipment and reagents - Two kind of ISO standard for detection and verification of LMOs adopted</td>
<td></td>
<td>The Laboratory of Molecular Biology, Institute of Biology, Mongolian Academy of Science has been visited during the evaluation.</td>
<td></td>
</tr>
<tr>
<td><strong>3.3) Technicians and researchers in LMO detection</strong></td>
<td>By end of 2013 trainings completed.</td>
<td>Laboratory trainings has been completed</td>
<td></td>
<td>Progress Reports - Interviews at the Laboratory</td>
<td>The new staff is coached by highly qualified staff of the</td>
<td></td>
</tr>
</tbody>
</table>
### Trained: Institutional Capacity Strengthening for Detection and Verification of LMOs for Regulatory Compliance

- The first national LMO detection and verification, Risk Assessment and risk management training was organized in October 2012.
- Short specific trainings for researchers and technicians of the Central Laboratory of the Agency for Specialized Inspection were also organized in 2013.

- Reports of trainings (in Anubis)

### Reports of Trainings (in Anubis)

#### 3.4) Clear roles and responsibilities set by MoU between collaborating institutions

- **By June 2012 National Biosafety MoU will be signed between relevant professional institutions**
- Two relevant MoU have been signed so far with the National Agency for Specialized Inspection and National Customs Office of the Min. of Finance
- Approved document between the relevant organizations

### Objective / Outcome 4: Public Increasingly Aware and Ensured to Participate in Matters Related to LMOs

#### 4.1) A Strategy for Public Awareness and Participation in Decision Making Related to LMOs.

- **By June 2012 Strategy for Public Awareness developed and approved**
- Strategy for Public Awareness is developed and approved. The NBP includes a component on Public Participation.
- N/A in English language, only in Mongolian Language

- The Strategy for Public Awareness was developed in cooperation with the National Radio and National Television

#### 2) Special Educational Materials for Schools and Colleges Produced

- **By 2013 at least 3 different sets of educational materials for high school students on modern biotechnology and LMOs published and disseminated**
- 4 kind of brochures on Biosafety & LMOs have been published & disseminated, including an interesting Glossary on Biosafety (Mongolian-English)
- Printed brochures (Attached under technical documents in ANUBIS)

#### 3) Outreach Materials for Target Groups Prepared

- **By 2012 At least 3 national TV broadcasts**
- **By 2012 At least 6 national**
- 14 different short TV programs on Biosafety & LMOs made and aired by National Television of
- TV and radio programs are available on www.biosafety.mn website
- The Evaluation watched some of the registered programs and made an interview with the
<table>
<thead>
<tr>
<th>4) A regularly updated nBCH as a platform for public communication and participation</th>
<th>By 2012 nBCH created</th>
<th>- nBCH is developed and regularly updated at the Secretariat Office of the NBC in the MEGD (<a href="http://www.biosafety.mn">www.biosafety.mn</a>)</th>
<th>National TV director</th>
</tr>
</thead>
<tbody>
<tr>
<td>5) Public lectures and trainings organized</td>
<td>By 2013 at least 4 public lectures organized covering general info on safe use of modern biotechnology</td>
<td>- Lectures have been organized on safe use of modern biotechnology &amp; LMOs and events in the central square of Ulaanbaatar city, twice a year</td>
<td><a href="http://www.biosafety.mn">www.biosafety.mn</a> - Interviews with users convey an overall positive appreciation on the nBCH</td>
</tr>
<tr>
<td>Objective / Outcome 5: Mongolia’s LMO Database openly networked within National and Regional system for Biosafety</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>-------------------------------------------------</td>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>1) A database on national experts in crop science and biotechnology.</td>
<td>By end of 2012 database developed and fully operational.</td>
<td>- A database of about 50 national experts in crop science and biotechnology has been organized.</td>
<td>National experts database is available at the National Biosafety Committee and soon will be available on the <a href="http://www.biosafety.mn">www.biosafety.mn</a> website. The roster of the experts is a time-consuming task because the NBC Secretary has to personally check the CVs, translate them in English in many cases and upload to the nBCH.</td>
</tr>
<tr>
<td>2) A network among national and regional crop science and biosafety experts and institutions</td>
<td>By October 2013 network among experts and institutions at national and regional levels developed and operational</td>
<td>- Regional networking system yet not established</td>
<td>See comments on Regional cooperation in 4.3.2</td>
</tr>
</tbody>
</table>
4.3 Effectiveness: Attainment of project objectives and results

44. The Evaluation has assessed to what extent the delivery of the Outputs (see Table 1) has produced the short to medium term institutional changes and systemic effects (Outcomes) designed to achieve higher level of results (Impact). The achievement of the planned Outcomes of the Projects has been analysed and discussed with the Team of the Secretariat of the National Biosafety Committee (NBC) during the country visit, by using the following Table 2\(^\text{12}\) (sub-chapter 4.3.1), which describes in detail achievements at Outcomes level.

45. Sub-chapter 4.3.2 presents a qualitative analysis and interpretation of the Outcomes achieved in the light of the reconstructed Theory of Change (TOC) from Outputs to Outcomes depicted in Diagram 1, whereas Diagram 2 illustrates the TOC from Outcome to Impact and sub-chapter 4.3.3 discusses and makes an assessment of the Likeliness of Impact.

46. Overall, based on the assessment contained in the following three sub-chapters (4.3.1, 4.3.2 and 4.3.3), the Evaluation considers that the attainment of project objectives and results (Effectiveness) of the Project has been Satisfactory (S).

\(^{12}\) Based on a format that the Consultant had shared with the team of the Project before the country visit
4.3.1 Achievement of direct Outcomes

This sub-section presents in detail the achievements at Outcomes level. Achievements are considered Satisfactory (S).

Table 2: Assessment of Outcomes Achievement (based on App.7 / M&E Framework) Project “Capacity Building for Biosafety Implementation for Mongolia”

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Outcome indicator</th>
<th>Baseline Conditions</th>
<th>Target Achieved October 2014 (evidence-based) and comments</th>
</tr>
</thead>
</table>
| Outcome 1 | A fully functional and responsive regulatory regime on Biosafety in line with Cartagena Protocol | • Biosafety rules and regulation incorporated into LMOs Law of 2007.  
• Biosafety rules and regulation comply with Cartagena Protocol, ICCP checklist, and trade related obligations. | • Law on LMO adopted in 2007  
• No National Biosafety Program  
• No regulations in implementation of Law on LMOs especially on procedures for the risk assessment, thus linkage to environmental governance | • The final draft of the National Biosafety Program (NBP) was finalized and discussed in April 2014, with the Minister of MEGD and accepted. It will be formally approved by the Cabinet Secretariat of the Government in the next session. A Budget will be also included and submitted for approval and resource allocation by the Min of Finance.  
• Two Regulations have already been adopted: one on Inspections and the other on Customs.  
• Three other Regulations (General regulation, Registration & Risk assessment Regulation, and Transportation Regulation) have been prepared and in the process of approval  
• The new Food Law (2012) states that “food produced with new technology, bio organism sourced food items that are not registered and without international labels must not be imported” and that “Bio organism sourced raw food products that are not registered and evaluated by risk assessment must not be supplied to the market”.  
• There is a National Biodiversity Strategy Action Plan (NBSAP) until 2020 (midterm) and 2030 (long term), of which the NBP is part |
| Outcome 2: | Clearly defined roles and | National Biosafety | The National Biosafety Committee (NBC) is fully |

13 The first three columns reflect the content of the M&E Framework of the ProDoc, the last (forth) column reports the findings of the Evaluation
### Mongolia’s Implementation Mechanism for Biosafety

Program established at the administrative level

- Responsibilities for NCA and other government agencies
- Quantity and quality of institutional arrangements and coordination mechanisms on Biosafety effectively operating in the country
- Clear guidelines and procedures on M&E published by government and made available to stakeholders
- Percentage of applications processed within timeframe and according to established procedures
- Number of decisions for LMO applications made with public consultation as defined in Cartagena Protocol Article 23
- N. of enforcement procedures executed in case of non-compliance.

Committee established in 2008.
- Scientific Council established in 2009.
- Personnel from the NBC and other key Governmental institutions have limited training in biosafety
- General Inspection Agency and General Customs Agency operating for monitoring and inspection, but knowledge on LMOs is lacking
- Risk assessment concept on LMOs is new to Mongolia

- Committee is operational and effective. It is formed by 19 members (see chapter 4.6.3), is chaired by the Ministry of MEGD and is fully operational through a permanent Secretariat.
- There is a Scientific Council (9 members), consulted by the NBC according to the needs
- Two MoUs have been signed so far Between the NBC and the National Agency for the General Inspection and with the General Customs Agency.
- There are three on-going processes of approval and registration for contained use, one for a GMO product (private firm) for detecting intoxication from Arsenio (Risk Assessment has been carried out in Germany), and two presented by the University of Life Sciences (School of Agriculture). They are not yet uploaded on the nBCH.

### Outcome 2:

Mongolia’s Implementation Mechanism for Biosafety
Program established at the administrative level

- N. and % of public officers and inspectors with enhanced skills for detection, approval, monitoring and compliance of Biosafety regulations effectively in place and making sound use of the know-how received
- N. of key LMO detection

- Institutional and expert level capacity is insufficient particularly on detection and verification of LMOs
- Few Laboratories have equipment to detect the presence of LMOs in crops and food
- There is no reference

- An LMO detection laboratory has been established with PCR machine at the Institute of Biology of the Mongolian Academy of Sciences. The senior staff at the Institute is highly specialized in Molecular Biology. The lab does not yet comply with standards to be a Reference Laboratory.
- Other laboratories exist that can carry out GMO qualitative analysis (not quantitative), for instance at the National Agency for Specialized Inspection.
- Trainings for technical staff and for inspectors on detection,
<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Mongolia's LMO Database openly networked within National and Regional System for Biosafety</th>
<th>Laboratory in Mongolia</th>
<th>Laboratories in operation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome 4:</strong> Public increasingly aware and ensured to participate in matters related to LMOs</td>
<td>• % of public showing awareness of biosafety in opinion polls&lt;br&gt;• Numbers of people participating in public meetings and debates on biosafety&lt;br&gt;• Quantity and quality of outreach materials developed for targeted audiences (general public, policy makers, schools and academia, media)&lt;br&gt;• Reports on LMO applications on BCH</td>
<td>• No public awareness strategy in place&lt;br&gt;• Limited public awareness and participation in matters on LMOs&lt;br&gt;• No educational and awareness materials as well as means for communication for schools, colleges and general public&lt;br&gt;• No nBCH created</td>
<td>approval, monitoring and compliance of Biosafety regulations have been completed (almost 35 people trained as “trainers”), yet, there have not been opportunities so far to put in practice the “know how” and to transfer it to new staff;&lt;br&gt;• There is the need to improve staff capabilities through supplementary training</td>
</tr>
<tr>
<td><strong>Outcome 5:</strong> Mongolia’s LMO Database openly networked within National and Regional System for Biosafety</td>
<td>• National Database made public on BCH and used&lt;br&gt;• National &amp; Regional Networking effectively used for technical exchange and cooperation among countries</td>
<td>• Limited database and networking between national experts and no networking at regional level</td>
<td>• Strategy for Public Awareness developed and approved.&lt;br&gt;• All foreseen public events (TV broadcast, newspaper articles, public lectures, debates and events) have been implemented&lt;br&gt;• Outreach materials (video) have been produced for two Agencies (Customs and Inspection Agencies).&lt;br&gt;• Different sets of educational materials foreseen for high school students produced and disseminated&lt;br&gt;• National BCH created</td>
</tr>
</tbody>
</table>
4.3.2 Project outcomes from reconstructed TOC

47. As mentioned in chapter 3.9, the reconstruction of the TOC has permitted to streamline the results framework of the Project, by grouping Outputs in four clusters and identifying four Immediate/Direct Outcomes that contribute to the main Project Outcome, as shown in Diagram 1 that follows. The expected Direct Outcome 1 “a fully functional and responsive regulatory regime established and consolidated”, has been partially achieved, building upon the Biosafety Law approved in 2007. As outlined in previous Table 2, two relevant Regulations have already been adopted, while other three have been prepared, discussed and are in their way to be formally adopted, too. The inclusion of GMOs issue in the Food Law approved in 2012 and the insertion of the NBP in the National Biodiversity Strategy Action Plan (NBSAP) 2020 are also relevant elements of the Biosafety regulatory regime. Of course, due to the recent or still on-going approval of the Regulations, it cannot be claimed, as the Outcome goes, that a fully functional and responsive regulatory regime is in place and consolidated. Yet, the Evaluation considers that the national capacities exist and the institutional context is favorable for a smooth and fast achievement of Direct Outcome 1.

48. The institutional strengthening of national stakeholders (Direct Outcome 2) has been achieved in different aspects. The main achievement is the consolidation of the National Biosafety Committee (NBC). The Committee, established since 2008, is by law (art. 4 and 5 of the National Biosafety Law of 2007) the key-player in Biosafety strategic planning and decision-making, as well as in the steering and coordination of the implementation of the law, its regulations, guidelines and, of course, of the NBP. The NBC is made fully functional through a permanent Secretariat hosted in the MEGD with currently three full-time staff (the Secretary herself, a Project Officer and a Finance Officer). The Secretary responds to the chairman of the NBC, the Ministry of the MEGD. Therefore, in Mongolia, the NBC has not only the function of strategic guidance (as in most of the countries), but also a clear operational mandate, with implementing and coordinating roles, through the Secretariat.

49. Another relevant institutional achievement contributing to Direct Outcome 2 is the setting of the first GMO detection laboratory (quantitative analysis through PCR), which represents a crucial advance for the country. However, concerns about the financial sustainability of the Institute have been raised by the Director and will be discussed in Chapter 4.4.2 (Financial sustainability).

50. Outcome 2 has also been achieved through Capacity Building activities, both in terms of staff training (inspectors, public officers, laboratory specialists, etc.), decision-makers awareness raising and lobbying, as well as through the production and publication of two National Guidelines for the Inspectors of the Agency for Specialised Inspection and for the Officers of the General Customs Office. Many of the workshops have been of short duration (mostly one or two-day sessions) aiming at introducing Biosafety, sharing GMO related information, explaining the content of the National Law, discussing institutional interaction and making lobbying and advocacy. However, capacity building, particularly technical and procedural capabilities, can only improve through specific and more focused trainings and their concrete application, which has been so far missing, due to the lack of practical opportunities. As a matter of fact, Risk Assessment and Risk Management remain theoretical notions, so far as applications or “real time” cases have not been handled.

51. Based on all the exposed in the previous paragraphs, the Evaluation has found that significant and quick progresses have been done for the improvement of the institutional framework of Biosafety in the
country. It is nevertheless evident, and widely recognized by the stakeholders, that a phase of operationalization and consolidation should be soon put in practice, not to lose momentum and participation, hence enabling a higher level of institutional uptake by the national partners. This is a core-issue for the sustainability of the results achieved so far.

52. Public awareness (Direct Outcome 3) has also dramatically increased, thanks to a widespread programme of information and mass-communication (TV, newspapers, debates, etc.) and to the production of outreach material (posters, brochures, etc.). The National Biosafety Clearing House (BCH) has also been created. Nevertheless, public awareness is still insufficient and, according to a public survey of the national TV commissioned by the Project, the general public is eager to know more about “what is good and what is wrong”\(^\text{14}\) with GMOs. Two Civil Society Organizations (CSO) are represented in the BCH, but there is evidently room for a more meaningful and active participation of CSOs and of the private sector, particularly farming and agro-business sector, in the strategic steering of the Biosafety Agenda in Mongolia (see also 4.6.3, Stakeholders participation)

53. National and Regional Networking (Direct Outcome 4) still is at a primary stage, though the NBC Secretariat is dedicating considerable time and energies to create and update the national roster of Biosafety Experts in the BCH. Language is certainly an issue that hampers a smooth progression in this area\(^\text{15}\). As far as the regional cooperation and networking are concerned, despite some remarkable events (for instance the 11th Biosafety National Project Coordinators / NPC Meeting held in Ulaan Bataar in 2013), there is not yet tangible evidence of a structured cooperation or networking beyond the framework of the Project. On this regard, some argue that Mongolia should orient its regional cooperation towards Central Asia countries due to cultural and environmental affinities, as well as the possibility of using Russian as a shared, communication language, at least with some of those countries.

54. Direct Outcomes 1 to 4 have jointly, though unequally (being Outcomes 1 and 2 the most important), contributed to the achievement of the main Project Outcome, at the top of Diagram 1 here below: “A National Biosafety Framework (NBF) established and operational through a National Biosafety Program (NBP) that includes a multiannual Work Plan and Budget”. By its characteristics, the NBP can be regarded as a sort of operationalization of the National Biosafety Framework elaborated in 2005.

55. As a matter of fact, the NBP is a comprehensive National Programme with five main components, two Work Plans (2014-2017 and 2018-2021) with Activities, Responsibilities, Calendar (years) and a Monitoring Framework with Indicators. On a separate document, a budget has been elaborated and will be presented to the Ministry of Finance for funding, once the Programme is officially approved by the Cabinet Secretariat of the Government, hopefully in a very near future. The five components of the NBF are: a) Legal Environment, b) Institutional Capacity (National Biosafety System), c) Risk Assessment / Management and Protection of Genetic Resources, d) Public participation and Public-Private-Civil Society Partnership, e) Capacity Building. The analogy with the components of a National Biosafety Framework is evident. At the moment of the Evaluation, an English version of the Programme was not yet available, but it will be prepared shortly.

\(^{14}\) As referred by the Public TV National Director during the interview with the Consultant

\(^{15}\) The Secretariat has to review all the CVs of the national experts (when they are redacted in English) or translate them into English, when they are in Mongolian or Russian.
56. Diagram 1 here below identifies the National Biosafety Committee (NBC) as the key-driver for the attainment of the Outcomes together with the NCA (MEGD), where the NBC Secretariat is located. Notwithstanding the leading and coordinating role of the Secretariat, it is clear that the full achievement of the Outcomes is only possible and sustainable through the effective institutional up-taking of the other main national stakeholders involved. Though the NBP is substantially approved, all the actors are aware that making it “operational” will be the major challenge for the next few years. Moreover, when considering that its implementation also depends on some challenging “external” factors that, if not adequately tackled, could convert into major threats. That is why, the Evaluation considers that the NBP will be operational under the Assumption that the trained staff remains in place, that the scientific institutions, particularly (but not only) the Institute of Biology and its Laboratory are sufficiently funded to conduct effective Risk Assessment and Risk Management actions, and that biotech products are being developed in the country or otherwise accessible, hence creating real, concrete opportunities of GMOs management in Mongolia. As a whole, the Evaluation considers that the achievement of the main Project Outcome is Satisfactory (S).
Diagram 1: Theory of Change Project “Capacity Building for Biosafety Implementation for Mongolia”: From OUTPUTS TO OUTCOMES

MAIN PROJECT OUTCOME

“A National Biosafety Framework (NBF) established and operational through a National Biosafety Program (NBP) that includes a multiannual Work Plan and Budget”

DRIVERS: NBC plays a coordinating role. Institutional uptake by different stakeholders. ASSUMPTIONS: Biotech products being developed or available elsewhere and accessible. Trained staff remains in place. Scientific institutions are in place to conduct effective Risk Assessment and Risk Monitoring actions.

DIRECT OUTCOMES

1. A fully functional and responsive regulatory regime established and consolidated

2. Institutions Capacity strengthened for Biosafety management

3. Improved Public awareness and participation

4. National and Regional networking system for Biosafety established

DRIVERS: NBC and NCA (MEGD) playing a leading role, institutional uptake by different stakeholders

OUTPUTS

a) Policy and legal framework reviewed and gaps identified
b) Regulations developed and linked to environmental governance

c) Key institutions identified to be strengthened

b) Institutional arrangements and coordination mechanisms defining clear roles and responsibilities implemented and improved (MoU, etc.)
c) Cooperation between R & D institutions and regulatory bodies established
d) Enhanced infrastructures (reference laboratories, etc.)
e) Effective mechanism for monitoring and inspection in place (guidelines, manuals, etc.)
f) Technical Staff and decision makers trained (LMOs detection, risk assessment and management, decision making and risk communication, etc.)

a) Comprehensive public awareness and participation strategy set and linked to the national environmental policy/program

b) Materials on biosafety published in different media
c) Special educational materials for schools and colleges prepared.
d) Outreach materials for target groups prepared.
e) Conferences, info days, public debates organized f) nBCH platform regularly updated

DRIVERS: NPC, NBC Secretariat, NBC, NEA/NCA (MEGD), UNEP staff

a) Database and pooling of national / regional experts and resources established
b) A network established among national and regional crop science and biosafety experts and institutions
4.3.3 Likelihood of impact using ROtI and based on reconstructed TOC

57. The intended impact of the project is the Global Environmental Benefit to which it contributes: the enhanced conservation and sustainable use of biological diversity in Mongolia. The pathway from the Project Outcome (a fully operational NBP) to the intended Impact is not a straightforward process: transitional conditions (called Intermediate States) have to be fulfilled, as shown in Diagram 2, which presents our understanding of the causal logic and of the pathway from Outcome to Impact.

58. Three main Intermediate States (I.S.) have been identified. Under the conditions that, firstly, the NBP has the financial resources to effectively implement its Work Plan and, secondly, a resource mobilisation strategy is conceived and developed (as discussed under Financial sustainability, 4.4.2), the process will lead to “Improved decision-making processes for LMOs approval, effective implementation mechanisms and enhanced quality information and transparency” (I.S. 1). Key impact drivers in that step are the coordinating role of the National Biosafety Committee (NBC) and of the National Competent Authority/NCA (MEGD), effective LMOs management systems (e.g. for detection and referral, for handling applications, for risk assessment and monitoring), active stakeholders and public participation, quality information available and timely flowing into BCH and national websites.

59. Improved decision-making will lead to “Improved Governance of National/International Biosafety systems based upon: Rule of Law and Compliance, Accountability and Liability, Equity, Transparency and Citizens’ Participation” (I.S. 2), under the assumption that the political will of the Governments is not missing. That should be reflected in the consolidation of NBP Work Plans to streamline national policy on Biosafety into government plans and in an effective strategy of resource mobilisation put in place. The main impact drivers at that stage will be effective forms of stakeholders participation (in planning, decision making and funding), conducive to open and transparent information flows and negotiation processes at different levels. Another Assumption is that the COP-MOP (the Conference of the Parties serving as the Meeting of the Parties to the Protocol) is playing its role of governing body of the Protocol.

60. The Intermediate State 3 (I.S. 3) is the Objective of the Protocol itself, as stated in its art. 1: “The safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements”. Political will and negotiations will act as impact drivers at that level, under the main assumption that the NCA’s decision-making persists based on rigorous Risk Assessment and Risk Management best practices, and that financial resources flow into Biosafety programs mechanisms.

61. Under the same assumption that internationally followed principles of Risk Assessment and Risk Management are lastingly used by the National Competent Authorities (NCA) for deciding on LMOs production/use, the Project Impact (Enhanced Conservation and Sustainable Use of Biological Diversity in Mongolia) can be achieved.
Diagram 2: Theory of Change Project “Capacity Building for Biosafety Implementation for Mongolia”: From OUTCOME to IMPACT

**MAIN PROJECT OUTCOME**

A National Biosafety Framework (NBF) established and operational through a National Biosafety Program (NBP) that includes a multiannual Work Plan and Budget

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**IMPACT**

Enhanced conservation and sustainable use of biological diversity in Mongolia

**ASSUMPTIONS:** The NBF is in place and fully functional. Approvals by NCA for large scale deployment of LMOs are based on internationally followed Risk Assessment (RA) and Risk Management (RM) principles and methods.

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**I.S. 3**

Safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements, as requested under art. 1 of Cartagena Protocol (CPB)

**IMPACT DRIVERS:** Political will, enforcement of the (national level) LMO regulations /legislation. International commitment

**ASSUMPTIONS:** Best practices of Risk assessment and Management are sustained, replicated and upgraded. Financial Resources flow is consolidated

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**I.S. 2**

Improved governance of national / regional biosafety systems based upon: Rule of law and compliance, Accountability and Liability, Equity, Transparency, Citizens’ Participation

**IMPACT DRIVERS:** Open and transparent negotiations processes. Public continues to be informed. Effective forms of stakeholders participation (planning, decision making, funding)

**ASSUMPTIONS:** Work Plans of the NBP are developed to streamline NBP into government plans. An effective resource mobilisation strategy in place. Political will of the Government. COP-MOP playing its role

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**I.S. 1**

Improved Decision-making, Effective mechanisms, Enhanced quality information and transparency

**IMPACT DRIVERS:** NBC and NCA playing a coordinating role. Effective LMOs management systems. Quality information available and flowing into BCH. Stakeholders and public participation

**ASSUMPTION:** NBP still has the financial resources. A resource mobilisation strategy conceived and developed
62. According to the TOR of the Evaluation, the Evaluation has to assess the likelihood of the Project to achieve the expected Impact, by using the rating scales of Table 3 and 4 that follow. Based on the analysis presented in this Chapter, particularly considering that some direct Outcomes have been partially achieved, the Evaluation deems that the Project deserves a “B” Outcome rating and that the progress towards Intermediate States has started, though not yet with tangible results, since the NBP is in its inception stage (Rate “C”). As a result, the aggregate rating is “BC”. Moreover, considering the increased dynamics shown by the Project over its life-time, a “+” notation has been given, resulting in a conclusive rating “BC+”.

<table>
<thead>
<tr>
<th>Outcome Rating</th>
<th>Rating on progress toward Intermediate States</th>
</tr>
</thead>
<tbody>
<tr>
<td>D: The project’s intended outcomes were not delivered</td>
<td>D: No measures taken to move towards intermediate states.</td>
</tr>
<tr>
<td>C: The project’s intended outcomes were delivered, but were not designed to feed into a continuing process after project funding</td>
<td>C: The measures designed to move towards intermediate states have started, but have not produced results.</td>
</tr>
<tr>
<td>B: The project’s intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding</td>
<td>B: The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long term impact.</td>
</tr>
<tr>
<td>A: The project’s intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding</td>
<td>A: The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long term impact.</td>
</tr>
</tbody>
</table>

63. According to the used methodology, the rating obtained is translated onto the usual six point rating scale used in all UNEP project evaluations, as follows, resulting that the Project can be considered “Likely” to achieve the expected Impact.

<table>
<thead>
<tr>
<th>Highly Likely</th>
<th>Likely</th>
<th>Moderately Likely</th>
<th>Moderately Unlikely</th>
<th>Unlikely</th>
<th>Highly Unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA AB BA CA BB+ CB+ DA+ DB+</td>
<td>BB CB DA DB AC+ BC+</td>
<td>AC BC CC+ DC+</td>
<td>CC DC AD+ BD+</td>
<td>AD BD CD+ DD+</td>
<td>CD DD</td>
</tr>
</tbody>
</table>
4.4 Sustainability and replication

64. The evaluations has analysed to what extent follow-up work has been initiated and how project results could be sustained and enhanced over time. The reconstructed TOC presented in the previous chapter has assisted in the evaluation of sustainability, by identifying the main driving forces and assumptions influencing Project’s achievements. Four aspects of sustainability have been addressed: a) Socio-political sustainability, b) Financial sustainability, c) Institutional sustainability, d) Environmental sustainability.

4.4.1 Socio-political sustainability

65. As discussed in the previous Chapters, the Project has given substantive steps in putting forward the Biosafety Agenda in the country at different levels and with a range of national partners: Governmental institutions, both at central and decentralised level, Parliament representatives, Academic world, Schools and Youth, General Public. As a matter of fact, taking into account the baseline situation, remarkable progress has to be acknowledged. Nevertheless, there is a consensual understanding that socio-political sustainability needs to be fostered through stronger alliances at national and regional levels, so as to enable effective forms of stakeholders’ participation in planning, decision making and funding (key-drivers from IS 1 to IS 2 in Diagram 2).

66. While national ownership is strongly supported by the active role of the NBC, the commitment, interest and incentives of the members for jointly implementing the National Biosafety Programme, needs to be continuously pursued by the NBC Secretariat, which still has a key-role to play in the immediate future. There is also the need to establish stronger links with Civil Society Organizations, particularly those active in environmental and consumers’ rights protection, as well as with private sector actors, particularly those interested in making use of Biotechnology. Most of the national stakeholders stress the need to link Biosafety and Food Safety on certain common issues like imported food’s quality control and labelling, thus creating synergies and gaining more socio-political consensus. Overall, socio-political sustainability is rated L (Likely).

4.4.2 Financial sustainability

67. Financial sustainability is surely an area of concern among the stakeholders. The approval of the National Biosafety Program (NBP) by the Government gives elements of optimism, since the NBP will be included in the exercise of budgetisation by the Ministry of Finance. However, whether the budget assigned to the NBP would be enough to carry out the planned activities or not, it remains to be seen. The decrease of mining’s (the main national industry) revenues put constraints on the State’s budget and strong lobbying is needed to include Biosafety among the development agenda of the Government. On the other hand, modern biotechnology tools can be developed in the areas of bioleaching and bioremediation to make mining processes more environmentally friendly, for which Biosafety can play a critical role in which such services can be paid for by the private sector.

68. The Institute of Biology, belonging to the Mongolian Academy of Science, where the GMOs laboratory is placed, is particularly concerned since they know that public funds allocation to the Research sector could be reduced. On the optimistic side, it has to be highlighted that in the “high season” for GMOs testing (autumn and spring), the Laboratory is carrying out an average of 2-3 GMO test / day, which seems sufficient at least to buy reagents and primers for the analyses.

69. Though GEF 6 has allocated 5M USD to Biodiversity for Mongolia (on a total of 12M USD allocated to the country) and Biosafety is included in the Biodiversity package, the need for alternative sources of funding for the implementation of the NBP is recognized. The main stakeholders, however, do not seem
to have sufficient experience on how to deal with the issue. Some external support could be needed to help them establishing a fund mobilisation strategy. Financial Sustainability is rated ML (Moderately Likely).

4.4.3 Institutional sustainability

Institutional sustainability is crucial for the progress of the results achieved so far. The Biosafety Governance presently in place looks robust, particularly the NCA (MEGD), the NBC and the structured cooperation with some key-stakeholders (e.g. National Agency for Specialised Inspection, Customs Office, National University). However, such governance has to be tested under different and more demanding circumstances, once the NBP is being implemented and the Biosafety “machine” is put “under stress”. Overall in the country, governance structures, processes and procedures look quite well established and that certainly represents a favourable environment for Biosafety Governance and its institutional sustainability.

70. Food Safety is a major issue in Mongolia and the Food Safety Law, which also mentions GMOs (see Outcome 1 in Table 2, 4.3.1), has been approved in 2012. As emerged during the stakeholders interviews, Biosafety is often associated with Food Safety (quality of the imported and processed food) and with other relevant issues of Biodiversity (e.g. Invasive Species, Plant Genetic Resources Protection). These correlations have to be regarded as positive from the point of view of the institutional sustainability, since they can bring interesting and relevant allies to the Biosafety and Biosecurity national agenda.

71. As pointed out in the Diagram 2 of the TOC, the COP-MOPs also contributes to institutional sustainability at national and regional levels, through appropriate and effective decisions. Regional cooperation of Mongolia in the Biosafety sector is still at an early stage, with South Korea, Japan and Central Asia countries (e.g. Kazakhstan) the most promising perspectives. A stronger regional cooperation could not only contribute to institutional sustainability, but also make national programmes more cost-effective, through cost-sharing and service-sharing, hence also adding to Financial Sustainability.

72. Biosafety institutional sustainability would also benefit from increased cooperation and effectiveness within the UN system. It is quite unfortunate that, while national stakeholders do see the linkage between Food Safety and Biosafety, the UN agencies do not adequately help them to build partnerships, for instance linking Codex Alimentarius (supported by FAO/WHO through the Ministry of Agriculture and the Ministry of Health)\(^\text{16}\) and Biosafety (supported by UNEP through the Ministry of Environment and Green Development), or linking the International Treaty for Plant Genetic Resources (again, under the FAO umbrella) with Biosafety (under the GEF/UNEP umbrella). Dispersion of funds and duplication of efforts do not help institutional sustainability.

73. On the UN side, the good news is that Mongolia is one of the six pilot-countries for a joint UN initiative, PAGE\(^\text{17}\), assembling the United Nations Environment Programme (UNEP), the International Labour Organization (ILO), the United Nations Development Programme (UNDP), the United Nations Industrial Development Organization (UNIDO) and the United Nations Institute for Training and

\(^{16}\) In Mongolia, a National Committee has been established in 2002 under the Ministry of Food and Agriculture with the purpose of implementing national programmes and enforcing the inspection activities in food section.

\(^{17}\) The Partnership for Action on Green Economy (PAGE) is a Rio+20 initiative, which recognizes the green economy as a vehicle for sustainable development and poverty eradication.
Research (UNITAR) in building national green economy strategies that will generate new jobs and skills, promote clean technologies, and reduce environmental risks and poverty. According to GEF Focal Point in the country, PAGE could also be an opportunity for scaling up Biosafety. As a whole, Institutional Sustainability is rated L (Likely).

4.4.4 Environmental sustainability

74. The Precautionary Principle is one of the underpinning principles of the CPB and it is well reflected in the National Biosafety Law and in the National Biosafety Programme (NBP). Risk Assessment and Risk Monitoring are at the core of the NBP and are recognized as priority areas for a possibly renewed Biosafety funding through GEF 6. Environmental Sustainability is rated Likely (L).

4.4.5 Catalytic role and replication

75. The Project has catalysed outstanding behavioural changes in the country, by specifically supporting the participatory elaboration of a strategic programme like the National Biosafety Programme, the setting up of the first national laboratory for GMOs quantitative detection, the diffusion of knowledge and complex scientific concepts to a large public through incisive information campaigns.

76. The Project has also contributed to institutional changes by supporting the consolidation of a large National Biosafety Committee of 19 members and its operational Secretariat, as well as the establishment of stakeholders’ partnerships through a Memorandum of Understanding. Giving to the National Biosafety Committee an operational role (not only of strategic guidance) through the setting of a permanent national Secretariat seems an innovative experience that could be worth replicating in other countries with similar contexts.

77. Eventually, the Project has represented an extraordinary opportunity for motivated individuals to be catalytic of changes in their own country and to substantively upgrade their technical and managerial capacities. Overall, the catalytic role and replication is considered Highly Satisfactory (HS).

4.5 Efficiency

78. The Project has been very cost-effective and time-effective in its execution. It has actually completed all the planned activities and delivered the foreseen outputs in the established time-frame (36 months) and with a relatively small budget, when compared to similar projects in other countries. Cooperation among stakeholders has contributed to cost-effectiveness, as, for instance, the case of the National TV information campaigns at a reduced price, or the use of the national expertise existing in Governmental institutions. Efficiency has been rated Highly Satisfactory (HS).

4.6 Factors affecting performance

4.6.1 Preparation and readiness

79. The quality of project design was assessed in the Inception Report and rated Satisfactory (S). It is interesting to observe that the project’s design scored better (Highly Satisfactory, HS) in the sections of Governance and Supervision Arrangements, and in Management, Execution and Partnership Arrangements, which are also areas in which the Project has been quite successful in the implementation. That could mean that during the preparation of the Project, key points were rightly identified and addressed.
80. The fact that, as pointed out in the previous chapter, the results were achieved in the expected timeframe and the budget proved adequate for the expected results (as discussed in 4.6.5), show that the Project design was actually accurate on those points. On the contrary, the fact that the main Project Outcome (the National Biosafety Programme) was not minimally discussed in the ProDoc is surely surprising and raises questions on the methodology of elaboration of the Project Document. Preparation and readiness should be considered Moderately Satisfactory (MS).

4.6.2 Project implementation and management

81. The mechanisms of project implementation have followed those outlined in the project document. The guiding/oversight central roles of the MEGD (NCA and also NEA of the Project) and of the NBC were clearly foreseen in the project document and have been effectively implemented. The direct execution responsibility of the NPC, a national expert hired by the Project, also proved to be an effective choice. The different roles and mandates have been respected and implemented.

82. The National Competent Authority (NCA) changed since the time of the project design. The Ministry of Nature, Environment and Tourism (MNET) became Ministry of Environment and Green Development (MEGD), with, as the denomination shows, an increased focus on Sustainable Development. The NEA has been involved in the management of the Project since the beginning and has guaranteed the smooth transition of the direct management responsibility from the Project to the Secretariat of the NBC, which is, to all extents and purposes, an integral part of the MEGD.

83. The National Biosafety Committee, as already discussed in 4.3.2 (Achievement of Outcomes), has been highly instrumental to ensure strategic guidance, institutional coordination and oversight of the project implementation. The establishment of a full-time executive Secretariat of the NBC has been instrumental to avoid possible problems related with the transition of management functions from the project to the NEA. The Secretariat of the NBC is formed by three permanent staff of the MEGD: the Secretary, a Project Officer and a Finance Officer, who work full time for the Secretariat and are hosted in the MEGD. The Secretariat responds to the Chairman of the NBC (the Min. of MEGD). Project implementation and management is considered Highly Satisfactory (HS).

4.6.3 Stakeholder participation and public awareness

84. As already mentioned, the identification of a number of possible stakeholders in the preparatory phase of the project and their effective engagement during the implementation is one of the strong elements of the Project. According to information confirmed during the interviews, the NBC meets regularly, at least once or twice a year in formal sessions of decision-making and reporting, while informal consultations and ad-hoc meetings called by the Secretariat are quite frequent, almost monthly. The overall impression is of a dynamic and participatory body, though in a phase of structuration and consolidation. The Evaluation has received the impression of a meaningful participation of the stakeholders in the Committee and a remarkable feeling of ownership over the achievements of the NBC, particularly on the National Biosafety Programme.

85. The composition of the NBC can nevertheless raise some concerns regarding the unbalanced representation of the different sectors: 15 out of 19 members are from Ministries and Public Agencies, two from Academic institutions and two from Civil Society. Since the Biosafety Law (art. 4) only defines the qualitative composition of the NBC, but not the number of members of each sector to be represented, a more balanced structure could bring about a more diversified participation and increase
the internal debate in the Committee. Admittedly, the lack of representatives from the Private Sector, including the Biotech Industry and the Farmers, though explicable in this initial phase, needs to be addressed in the near future.

86. The public awareness initiatives has so far aimed to convey information to the general public or to certain target groups (e.g. students) and to promote debate within specific audiences (experts, professors, officers, etc.). On this regard, too, the transition to more meaningful forms of participation of groups, associations and citizens in the national Food Safety and Biosafety agenda is needed. Overall, Stakeholders participation can be rated Satisfactory (S).

4.6.4 Country ownership and driven-ness

87. Country ownership is surely strong and, as previously explained, an undeniable factor of sustainability. The NBC is an active body with a permanent Secretariat, well integrated in the MEGD. Collaboration with other relevant national stakeholders has been so far effective, particularly with some key-partners like Academic Institutions and the National Agency for Specialised Inspection that have been very responsive to the need of Biosafety agenda. Overall, Country ownership is rated Highly Satisfactory (HS).

4.6.5 Financial planning and management

88. As previously remarked under the chapter on Efficiency (chapter 4.5), the Project has been able to efficiently and timely execute the planned activities. That has been possible also due to application of proper standards of transparency and clarity in the financial planning, management and control. Main reasons for that are:
- The appropriate use of the Anubis platform that allows the quarterly financial reporting from the Project to UNEP and subsequent replenishment by UNEP, as well as the aggregate financial statement at any point in time (updated to the end of the previous trimester);
- The regular and fast disbursement from UNEP after the Project requests (ten instalments in total);
- Annual audits have been carried out from 2011 onwards, the last one took place in June 2014 and stated that the financial statement of the Project “was presented fairly in all material respects, fund and expenditure” and that “all granted fund is disbursed as per its purpose”.
- The timely procurement of goods, mainly office and laboratory equipment, according to the established procedures (tendering, etc.).

89. By comparing financial planning with actual project costs, the rate of expenditures has been 100%. Four budget revisions have been approved that did not essentially alter the content of the activities and the results. Co-financing of the Government has materialised according to the originally planned, as also confirmed by the Final Project Auditing. Co-financing has been 100% in kind and the major co-financed costs have regarded costs for national personnel, training and meetings, translation and publication of materials, sub-contract to governmental agencies. A supplementary funding has also been received by UNDP (nearly 9.000 USD for workshops and training). The table in Annexe 5 summaries co-finance information and a statement of project expenditure. Financial planning and management scores Highly Satisfactory (HS).

4.6.6 UNEP supervision and backstopping

90. National stakeholders consider UNEP supervision and backstopping of high quality, for four main reasons:
- The technical and administrative backstopping of the Biosafety Unit has been constant and effective, through prompt replies (through skype and email) to any doubt or question on financial issues, on the use of the platform ANUBIS, as well as by providing technical advice on substantive issues related to project execution, such as institutional aspects, definition of priorities;
- The support received through the field missions of UNEP Task and Financial Managers, during the regional meetings of the National Project Coordinators held in Mongolia in 2013;
- The organization of the yearly meetings of the National Project Coordinators, which are considered a valuable moment of exchange and horizontal learning, technical and administrative updating, and of general “empowerment” of the project coordinators.
- The quality and timeliness of the technical assistance received by UNEP international consultants and/or the possibility to upgrade national capacities through the participation to regional or international meetings, workshops, trainings.

91. However, it should be noted that there is no evidence of any involvement of the UNEP Regional Office (Bangkok) in activities of project supervision and backstopping. Overall, UNEP supervision and backstopping is rated Highly Satisfactory (HS).

4.6.7 Monitoring and evaluation

The quality of the logical framework of the Project was considered Unsatisfactory in the assessment of the Project Design presented in the Inception Report. That was due to evident misinterpretations and confusions between outputs and outcomes, outputs and activities, indicators and targets, etc. There was also a mismatching between App. 6 of the ProDoc (Results Framework) and App. 4 (Key deliverables and milestones). As a consequence, the Results Framework was judged to be “fuzzy”.

92. On the contrary, the M&E plan (App. 7 of the ProDoc) was detailed and the organisational arrangements were clearly specified. However, the Project Budget contemplated a total amount of 18.000 USD for two evaluations (Mid-term and Terminal), the annual Audits (four in total) and all Monitoring activities, which, of course, proved insufficient. As a matter of fact, the Mid-term Review did not take place, due to the low resources and the satisfactory delivery and was substituted by the PIR for 2013 plus a validation of the tracking tools. In addition, a follow up meeting was carried out on the margins of the NPCs meeting that took place in Mongolia in 2013.

93. The Evaluation has to remark (and not specifically for the case of Mongolia’s project) that the information acquired through the UNEP/GEF Monitoring system in place (progress reports, PIR rating, etc.), though it was timely flowing from the project to UNEP, is not very helpful to really understand (at least, by an outsider view) the progress and problems of project implementation. The formats are not helpful for channelling synthetic data and meaningful information18. As a result, the reports are often repetitive, poor and boring; the scoring exercise looks somewhat “standardised” and rarely supported by any evidence or value judgement. In sum, the effectiveness of the whole system, in terms of result-based management, is highly questionable.

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18 Reporting format is UNEP’s template for reporting
As a whole, Monitoring and Evaluation score Moderately Unsatisfactory (MU).

4.7 Complementarity with UNEP strategies and programmes

94. As mentioned in chapter 4.1.2, the Project relates to two of the cross-cutting areas of UNEP’s intervention: Ecosystem Management (EM) and Environmental Governance (EG). Regarding the **Sub-programme Ecosystem Management**, the Evaluation considers that the Project has been greatly instrumental to the achievement of Expected Accomplishment (EA) 3 in PoW 2014-15, as showed in the comparative table here below:

<table>
<thead>
<tr>
<th>EM Expected Accomplishment (EA) 3</th>
<th>Project contribution (how)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Outputs will focus on the collaborative efforts aimed at strengthening the science-policy interface at global, regional and national levels …”</td>
<td>Setting and implementation of NBC, which is a valuable platform for interfacing and coordinating scientific and political sectors and their constituencies.</td>
</tr>
<tr>
<td>… and assisting countries to create the necessary institutional, legal and policy conditions to integrate goods and services into their development planning, decision making and poverty reduction measures.</td>
<td>- Supporting NBF implementation, which includes institutional, policy, legal and regulatory measures, as well as information and participation tools.</td>
</tr>
<tr>
<td>- Developing the National Biosafety Programs (NBP), which makes part of the overall national development planning</td>
<td>- - Supporting NBF implementation and NBP preparation, hence enabling the country to establish and further develop effective biosafety systems for the implementation of the Cartagena Protocol.</td>
</tr>
<tr>
<td>- Supporting NBF implementation and NBP preparation, hence enabling the country to establish and further develop effective biosafety systems for the implementation of the Cartagena Protocol.</td>
<td>- Contributing to Aichi Target 13 (minimizing genetic erosion and safeguarding genetic diversity), Aichi Target 17 (effective, participatory and updated national biodiversity strategy and action plan) and Aichi Target 19 (improving and sharing knowledge and science-based technologies relating to biodiversity).</td>
</tr>
</tbody>
</table>

95. Regarding **Sub-programme Environmental Governance**, the Project has been highly instrumental to the achievement of Expected Accomplishment (EA) b in PoW 2014-15, as showed in the comparative table here below:
The capacity of countries to develop and enforce laws and strengthen institutions to achieve internationally agreed environmental objectives and goals and comply with related obligations is enhanced. …

…a particular focus will be placed on supporting efforts of Governments to achieve internationally agreed environmental objectives and goals through strengthened law and institutions.”

Supporting NBF implementation and NBP preparation, which includes developing and implementing institutional, policy, legal and regulatory measures to comply with CPB.

The focus on National Biosafety Law adoption and implementation also enables country’s meaningful participation in the fourth Programme for the Development and Periodic Review of Environmental Law, known as the Montevideo Programme IV.

5 Conclusions and Recommendations

5.1 Conclusions

The UNEP-GEF funded Project “Capacity Building for Biosafety Implementation for Mongolia” has successfully supported the country in enhancing the national capacities to implement the National Biosafety Frameworks (NBF). Building upon the National Biosafety Law of 2007, the Project has largely contributed to the elaboration of five Regulations (General Regulations and specific Regulation on Inspection, Customs, Registration & Risk Assessment, Transportation), two of which already approved (Inspection and Customs) and three other at the final stage of their process of approval. These are remarkable results when considering the low level of awareness and information on Biosafety in the country, more specifically among the decision-makers, at the beginning of the Project.

As a matter of fact, the Project has rightly invested energies, time and resources in widespread activities of awareness raising and information at different levels of Mongolian society (TV broadcasts, articles on newspapers, public events, debates and conferences, activities in the schools, etc.) and this strategy has proved successful in creating interest and stimulating responses among the general public, the academic world, the governmental institutions and the policy-makers. Consciousness and trust have progressively increased and a favourable socio-political and institutional environment has been steadily built. Many realisations in terms of institution and capacity building make also part of project achievements: a considerable number of human resources have been exposed to or trained on Biosafety issues, guidelines and manuals have been produced, a GMO’s detection laboratory has been established. In sum, the
conditions for the socio-political and institutional sustainability of the Biosafety agenda in the country have been created and the country ownership on the process is undeniable.

99. The National Biosafety Committee (NBC) created by the Biosafety Law is currently a quite solid body, made operational and effective through a permanent Secretariat constituted by a dynamic and motivated nucleus of three full-time staff of the Ministry of Environment and Green Development (MEGD) that also liaises with the Secretariat of the Cartagena Protocol. This institutional arrangement has proved so far an interesting and viable form of linking the strategic guidance from the NBC and the concrete application of the decisions made and subsequent implementation of activities.

100. Many efforts have been deployed for the elaboration and approval of the National Biosafety Programme (NBP), considered the pivotal instrument for the implementation of all programs and activities concerning Biosafety in the country. The NBP is a comprehensive instrument of public planning including Work plans (2014-2017, 2018-2021), Monitoring & Evaluation framework and a Budget. After its approval by MEGD, the Programme is now in its final step for approval by the Cabinet Secretariat of the Government, after which it will be formally included in the National Plan and will be allocated a budget. This is, of course, a substantive point that enables institutional and financial sustainability.

101. The positive results of the Project cannot, however, put out of sight the challenges that the Biosafety agenda is currently facing and the concerns that exist and are made explicit by national stakeholders regarding its future development. The NBP, once approved (very soon, assumedly), is just the beginning of the operationalization of the Biosafety systems: inspection and detection systems must be made fully functional at decentralised and central level and combined with an efficient referral system, applications will have to be processed timely and rigorously, risk assessment and risk management implemented with sound technical advices and procedures. It is realistic to believe that, when the Biosafety “machine” is running, weak points and further needs will come up.

102. Biosafety is, by its own nature, a complex and multi-sectorial issue. Indeed, notwithstanding the coordinating role of the NBC and its Secretariat, the institutional framework of Biosafety in Mongolia is not a simple one, contemplating different actors in separate institutions (e.g. MEGD, the National Inspection Agency, Customs, etc.): decision-making and administrative procedures will have to be harmonized and fine-tuned. Similarly, human resources will face new technical or procedural problems and their capacity of problem-solving will be put to the test. Risk Assessment and Risk Monitoring, crucial for the future functioning of Biosafety national systems, are admittedly in need of increased capacity building, through more targeted training and coaching of the key human resources in charge of it. Outreach activities leading to a more meaningful and inclusive participation in decision-making of new actors from Civil Society and Private sectors, need to be pursued, too.

103. Financial sustainability, though presumably benefiting from a guaranteed public budget, will be quite surely in need of extra-budgetary sources to cope with capacity building activities, laboratory upgrading, outreach activities. For that, new alliances and partnerships have to be built, both internally and externally. In the perspective of more targeted, country-specific actions, a regional approach to problem-solving and to capacity building could be highly appropriate. Cost-effectiveness could also improve from increased coordination and interaction between UN agencies and programmes in the sectors of Food Safety and Food Security, Bio-diversity and Genetic Resources, Public Health, as well as with different Multilateral Environmental Agreements (e.g. Codex Alimentarius, Nagoya Protocol on Access and
Benefit Sharing of Genetic Resources, the International Treaty on Plant Genetic Resources for Food and Agriculture).

104. As requested by the TOR of the Evaluation, the overall ratings table for the different evaluation criteria is presented hereafter. As a whole, the Project can be rated as Satisfactory (S).

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Summary Assessment</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Strategic relevance</strong></td>
<td>The Project confirms all its relevance in addressing challenging and crucial issues and needs in the area of biodiversity’s sustainable use, in achieving internationally agreed environmental objectives and goals and in contributing to fulfil UNEP’s mandate and policy, as well as GEF priorities and strategies. (see 4.1)</td>
<td>S</td>
</tr>
<tr>
<td><strong>B. Achievement of outputs</strong></td>
<td>The Project has satisfactorily delivered the expected outputs. (see 4.2 and Table 1)</td>
<td>HS</td>
</tr>
<tr>
<td><strong>C. Effectiveness: Attainment of project objectives and results</strong></td>
<td>Project Outcomes have been achieved at a variable extent, but always satisfactorily, allowing the attainment of the main Project Outcome “A National Biosafety Framework (NBF) established and operational through a National Biosafety Program (NBP) that includes a multiannual Work Plan and Budget” (see 4.3.2)</td>
<td>S</td>
</tr>
<tr>
<td>1. Achievement of direct outcomes</td>
<td>Fully or at a large extent achieved (see 4.3.1, Table 2)</td>
<td>S</td>
</tr>
<tr>
<td>2. Likelihood of impact</td>
<td>Likely to occur through existing Driving Forces and under certain Assumptions (see 4.3.3, Diagram 2, Tables 3 and 4)</td>
<td>L</td>
</tr>
<tr>
<td><strong>D. Sustainability and replication</strong></td>
<td>Sustainability is overall likely to occur, but Financial Sustainability raises some concerns</td>
<td>ML</td>
</tr>
<tr>
<td>1. Financial</td>
<td>The approval of the National Biosafety Program (NBF) by the Government gives elements of optimism, since the NBF will be included in the exercise of budgetisation by the Ministry of Finance. However, whether the budget assigned to the NBF would be enough to carry out the planned activities or not, it has still to be seen. GEF 6 should assist. (see 4.4.2)</td>
<td>ML</td>
</tr>
<tr>
<td>2. Socio-political</td>
<td>The Project has taken substantive steps in putting forward the Biosafety Agenda in the country at different levels and with a range of national partners: Governmental institutions, both at central and decentralised level, parliament representatives, academic world, schools and youth, general public. (see 4.4.1)</td>
<td>L</td>
</tr>
<tr>
<td>3. Institutional framework</td>
<td>The Biosafety Governance put in place looks presently robust, particularly the NCA (MEGD), the NBC and the structured cooperation with some key-stakeholders (e.g. National Agency for Specialised Inspection, Customs Office, National University). (see 4.4.3)</td>
<td>L</td>
</tr>
<tr>
<td>4. Environmental</td>
<td>The Precautionary Principle is one of the underpinning principles of the CPB and it is well reflected in the National Biosafety Law and in the National Biosafety Programme (NBP). (see 4.4.4)</td>
<td>L</td>
</tr>
<tr>
<td>5. Catalytic role and replication</td>
<td>The Project has catalysed outstanding behavioural and institutional changes in the country, and created opportunities for the emergence of national “champions” (see 4.4.5)</td>
<td>HS</td>
</tr>
<tr>
<td><strong>E. Efficiency</strong></td>
<td>All planned activities completed and outputs delivered in the established time-frame and with a relatively small budget (see 4.5)</td>
<td>HS</td>
</tr>
<tr>
<td><strong>F. Factors affecting project performance</strong></td>
<td>The Project Design is Satisfactory, but the main Outcome (NBP) was not discussed in the ProDoc, which raises questions on the methodology of elaboration of the Project Document. (see 4.6.1)</td>
<td>MS</td>
</tr>
<tr>
<td>1. Preparation and readiness</td>
<td>Guiding/oversight role of the MEGD and of the NBC has been effectively implemented. The direct execution responsibility of the NPC has proved to be an effective choice. The different roles and mandates have been respected and implemented. (see 4.6.2)</td>
<td>HS</td>
</tr>
<tr>
<td>2. Project implementation and management</td>
<td>Meaningful participation of the stakeholders in the Committee and a remarkable feeling of ownership over the achievements of the NBC,</td>
<td>S</td>
</tr>
<tr>
<td>3. Stakeholders participation and public awareness</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.2 Lessons Learned

105. The setting of a permanent Secretariat of the NBC within the MEGD is an interesting institutional approach that combines a higher degree of autonomy and decision-making (when compared with a ministerial department) and the advantages of being inserted within a Ministry (institutional anchorage), which is also the NCA.

106. Projects can be highly cost-effective when institutional uptake and stakeholders’ participation and cooperation are high.

5.3 Recommendations

Based on the main Conclusions and Lessons Learned, the evaluation mission’s recommendations are the following:

107. **Recommendation 1**: to UNEP, NCA (MEGD), NBC

<table>
<thead>
<tr>
<th>Findings / Conclusions (§101, §102):</th>
</tr>
</thead>
<tbody>
<tr>
<td>The NBP is just the beginning of the operationalization of the Biosafety systems: inspection and detection systems must be made fully functional at decentralised and central level and combined with an efficient referral system, applications will have to be processed timely and rigorously, risk assessment and risk monitoring implemented with sound technical advices and procedures. It is realistic to believe that, as the Biosafety “machine” will be running; weak points and further needs will come up. Human resources will face new technical or procedural problems and their capacity of problem-solving will be put to test. Risk Assessment and Risk Monitoring, crucial for the future functioning of Biosafety national systems, are admittedly in need of increased capacity building, through more targeted training and coaching of the key human resources in charge of it.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>In order to consolidate the positive achievements obtained so far and considering the challenges of the implementation of the National Biosafety Programme, it is recommended to give continuity to GEF/UNEP assistance, namely through:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall project rating</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Country ownership and driven-ness</td>
<td>Country ownership is surely strong and an undeniable factor of sustainability. (see 4.6.4)</td>
</tr>
<tr>
<td>5. Financial planning and management</td>
<td>Proper standards of transparency and clarity have been applied in the financial planning, management and control. Good use of financial monitoring tools (Anubis, etc.). Rate of expenditure and Co-financing at 100%. (see 4.6.5)</td>
</tr>
<tr>
<td>6. UNEP supervision and backstopping</td>
<td>High quality, through constant coaching, in-country mission, NPC meetings, quality of consultants (see 4.6.6)</td>
</tr>
<tr>
<td>7. Monitoring and evaluation</td>
<td>Monitoring tools timely used but not very helpful to really monitor progress and problems, formats not helpful for channelling synthetic data and meaningful information, repetitive and poor, scoring not explained or justified. (see 4.6.7)</td>
</tr>
<tr>
<td>a. M&amp;E Design</td>
<td>A fuzzy Logical Framework, misinterpretations and confusions between outputs and outcomes, outputs and activities, indicators and targets, etc.</td>
</tr>
<tr>
<td>b. Budgeting and funding for M&amp;E activities</td>
<td>Insufficient</td>
</tr>
<tr>
<td>c. M&amp;E Plan Implementation</td>
<td>See above</td>
</tr>
</tbody>
</table>
a) Technical and methodological support of UNEP to the NBC Secretariat, particularly through coaching and targeted trainings;
b) Training needs assessment and targeted, intensive training to key human resources responsible for and/or directly involved in Risk Assessment and Monitoring;
c) Preparation, in collaboration with the National University, School of Agriculture, of a Biosafety Curriculum to improve capacities of the Inspectors of the National Agency for Specialised Inspection (nearly 2,000 Inspectors throughout the country);
d) Analysing the existing (in-country) University courses and curricula of disciplines related to Environmental Management, including Environmental Risk Assessment, Environmental Impact, Socio-Economic Impact, Risk Monitoring, Risk Communication, Environmental Law and Policy, in order to assess the possibility of integrating Biosafety issues in those curricula.

108. **Recommendation 2:** to NBC and UNEP

<table>
<thead>
<tr>
<th>Findings / Conclusions (§ 72, §73, §103):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial sustainability, though presumably benefiting from a guaranteed public budget, will be quite surely in need of extra-budgetary sources to cope with capacity building activities, laboratory upgrading, outreach activities. For that, new alliances and partnerships have to be built, both internally and externally. In the perspective of more targeted, country-specific actions, a regional approach to problem-solving and to capacity building could be highly appropriate. Cost-effectiveness could also improve from increased coordination and interaction between UN agencies and programmes as well as with different Multilateral Environmental Agreements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>In order to improve financial and institutional sustainability, it is recommended that:</td>
</tr>
</tbody>
</table>

| a) the NBC Secretariat approaches and builds and/or consolidates partnerships at national level with bilateral and multilateral agencies to jointly explore possibilities of cooperation on Biosafety related initiatives and projects, with particular reference to the UN agencies and programmes active in the sectors of Food Safety and Food Security, Bio-diversity and Genetic Resources, Public Health, the joint UN initiative PAGE, in the framework of Multilateral Environmental Agreements, such as **Codex Alimentarius**, Nagoya Protocol on Access and Benefit Sharing of Genetic Resources, the International Treaty on Plant Genetic Resources for Food and Agriculture, among others; |
| b) the NBC Secretariat approaches and builds and/or consolidates partnerships at regional level with Universities, Research Centres and Institutes in the area of training and capacity building, technical assistance on Risk Assessment and Risk Monitoring, support to LMOs detection in laboratory; |
| c) the NBC Secretariat and UNEP explore the possibility of implementing regional cooperation among NCAs of different countries in order to share costs and services in specific areas, as well as enhancing information sharing among the Asia-Pacific Regional Network\(^19\). |

\(^{19}\) [http://bch.cbd.int/onlineconferences/portal_art23/regnet_asia.shtml](http://bch.cbd.int/onlineconferences/portal_art23/regnet_asia.shtml)
Annexes

1. Response to stakeholder comments received but not (fully) accepted by the evaluators
2. Evaluation TORs (without annexes)
3. List of people met
4. Bibliography
5. Summary co-finance information and a statement of project expenditure by activity
6. Brief CV of the consultant
Annex 1
Response to stakeholder comments received but not (fully) accepted by the evaluators

NA
Annex 2
Evaluation TORs (without annexes)

Terminal Evaluation of the UNEP/GEF projects

- "Implementation of Bhutan National Biosafety Framework"
- "Support the implementation of National Biosafety for Lao PDR"
- "Capacity Building for Biosafety Implementation for Mongolia"

1. PROJECT BACKGROUND AND OVERVIEW

2. Project General Information

Table 1. Project summary

<table>
<thead>
<tr>
<th>GEF project ID:</th>
<th>IMIS number:</th>
<th>GEF OP #:</th>
</tr>
</thead>
<tbody>
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<td>3850 3642 4010</td>
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<td>GFL/2328-2716-4A85</td>
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<td>GFL/2328-2716-4B95</td>
<td></td>
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<tr>
<td>Focal Area(s):</td>
<td>BD3 –SP6 (Biosafety)</td>
<td></td>
</tr>
<tr>
<td>GEF Strategic</td>
<td>Environmental governance</td>
<td></td>
</tr>
<tr>
<td>Priority/Objective:</td>
<td>GEF approval date:</td>
<td>08/01/2010 22/03/2010 06/04/2011</td>
</tr>
<tr>
<td>UNEP approval date:</td>
<td>First Disbursement:</td>
<td>22/03/2010 17/09/2009 15/05/2011</td>
</tr>
<tr>
<td>Actual start date:</td>
<td>Planned duration:</td>
<td>48 months 48 months 36 months</td>
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<tr>
<td>Intended completion date:</td>
<td>Actual or Expected completion date:</td>
<td>06/30/2014 07/09/2014 26/04/2014</td>
</tr>
<tr>
<td>Project Type:</td>
<td>GEF Allocation:</td>
<td>$869,000 $995,000 $379,300</td>
</tr>
<tr>
<td>PDF GEF cost:</td>
<td>PDF co-financing*:</td>
<td></td>
</tr>
<tr>
<td>Expected MSP/FSP Co-financing:</td>
<td>Total Cost:</td>
<td>$1,723,000 $1,500,000 $753,300</td>
</tr>
<tr>
<td>$854,000 $505,000 $335,000</td>
<td></td>
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<td>Mid-term review/eval. (planned date):</td>
<td>Terminal Evaluation (actual date):</td>
<td>August 2014</td>
</tr>
<tr>
<td>30/06/2012 30/09/2011 30/01/2013</td>
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<tr>
<td>Mid-term review/eval. (actual date):</td>
<td>No. of revisions:</td>
<td>5 6 3</td>
</tr>
<tr>
<td>23/08/2012 30/09/2012 30/01/2013</td>
<td></td>
<td></td>
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<tr>
<td>Date of last Steering Committee meeting:</td>
<td>Date of last Revision:</td>
<td>01/01/2014 01/04/2014 01/01/2014</td>
</tr>
<tr>
<td>17/04/2013 02/04/2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disbursement as:</td>
<td>Date of financial closure:</td>
<td>Financial closure will be</td>
</tr>
<tr>
<td>$731,610.00 (Bhutan,</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 3. Project rationale

**Bhutan:** Bhutan ratified the Convention on Biological Diversity on August 25, 1995, the Cartagena Protocol on August 26, 2002 and completed its National Biodiversity Strategy and Action Plan in 2002; the NBSAP recognized the potential contribution of modern biotechnology to development and conservation of biodiversity. Bhutan started its project on the development of a National Biosafety Framework in April 2004. The final draft of the NBF project was completed in June 2006; this draft included a draft biosafety policy, a draft regulatory framework, a system for handling request to be in conformity with the provisions of the Cartagena Protocol, a system for monitoring and enforcement, and a system for public awareness, education and participation in decision-making on LMOs. This project intended to contribute to:

- The implementation of the Bhutan’s legislative framework on the safe use of biotechnology through regulations, orders, guidelines and procedures;
- The preparation of specific technical guidelines, forms and manuals;
- The strengthening of appropriate institutional structures for risk assessment and decision making;
- The development and implementation of policies for biotechnology and biosafety;
- The training of decision makers, scientists, and administrative and technical staff on legal and technical matters;
- The reinforcement of the existing infrastructures (laboratories) to strengthen monitoring;
- The setting up of a mechanism for monitoring and enforcement;
- The strengthening of communication and information exchanges relating to biosafety both at the national and BCH level;
- The development of systems for strengthening public awareness, education and participation in decision making on LMOs.
- Enhancing regional cooperation on biosafety and biotechnology in the SAARC subregion that would promote: sharing of technical resources and expertise; networking and sharing of information as well lessons and best practices; and alignment of biosafety policies amongst member countries.

Bhutan’s major concern at the time of project development was the safety of its citizens and its almost pristine environment. At the same time, increasing food security and food self-sufficiency were critical objectives. The use of biotechnology to achieve these objectives seemed a likely course of action for the country.

**Lao PDR:** The government of Lao PDR acceded to the Convention on Biological Diversity (CBD) on September 20, 1996 and completed its National Strategy on Environment to the year 2020 and Action Plan (2006 – 2014) by Prime
Minister’s Decree No. 120 / PM on August 27, 2004. This was followed by accession to the Cartagena Protocol on Biosafety (CPB) on November 1, 2004. Lao PDR participated in the UNEP/GEF National Biosafety Framework Development (NBF) project and completed it successfully in December 2004. This project aimed to assist Lao PDR to implement the draft Biosafety Law, which was based on the draft NBF, into a workable and transparent NBF by 2014, to fulfill its National Socio-economic Development Plan and implement its obligations as a Party to the Cartagena Protocol on Biosafety. Expected Project Outcomes included:

- Updated needs analysis of the country;
- The integration of Biosafety into National development plans;
- A workable regulatory regime for biosafety supported by regulations;
- An efficient administrative system for handling requests;
- Increased public awareness and education in biotechnology and biosafety and participation in decision making.

Lao PDR is a landlocked country where modern biotechnology R&D activities were still nascent in its national R&D institutions at the time of the project development. No biotechnology products from its national research laboratories were expected to be released in the immediate future. However, since Lao PDR was considered a potential net importer of biotechnology products, it appeared imperative that the country be prepared to handle import of LMOs. Additionally, with its porous borders, farmers may have unknowingly planted GM-crops like rice, without due risk management in place to reduce the potential negative impact of gene flow from the transgenics to the thousands of wild and other cultivated varieties. Additionally, information received at the time of the project development suggested that farmers, financed by foreign companies, were already cultivating GM-crops (soybean, cotton, papaya). Without the setting up of proper risk management procedures, the potential for dispersal of pollen from these transgenic crops to wild and cultivated conventional crops was deemed high.

Mongolia: Mongolia is a Party to the Convention on Biological Diversity since September 30, 1993 and Party to the Cartagena Protocol on Biosafety since October 20, 2003. The Ministry of Nature, Environment and Tourism (MNET) is the appointed National Focal Point for the Protocol. From 2002 to 2005, Mongolia successfully completed a draft NBF under the UNEP/GEF funded global project on “Development of National Biosafety Frameworks”. The project aimed to develop the National Biosafety Framework in agreement with the provisions of the CPB. The draft NBF formed the basis of a new law, which was enacted in November 2007.

However, Mongolia had very limited capacity to implement this new law. In order to operationalize it, supporting implementing activities were deemed necessary. This project intended to enable Mongolia to adopt essential regulations to help make the Law on LMOs workable and consistent with its international obligations. In addition, Mongolia did not have the technical capacity to detect LMOs, and LMOs could therefore enter the country without detection and prior risk assessment. Mongolia also lacked the capacity to perform any safety assessment of modern biotechnology applications, which might benefit the country’s food security through maintaining yields in the face of pest pressure (insects and weeds) and abiotic stress (temperature, drought and salt tolerance).

The project aimed to establish and operationalise Mongolia’s National Biosafety Framework and to assist Mongolia to comply with its obligations as a Party to the Cartagena Protocol on Biosafety so that Mongolia may make a safe use of modern biotechnology for sustainable development.

**4. Project objectives and components**

The overall goal of the projects was to put in place a workable and transparent national biosafety framework, in line with respective national development priorities and international obligations.

The projects’ objective was to develop the national biosafety capacities required to establish functional, workable and transparent national biosafety frameworks in accordance with national development priorities and international obligations.

The project purpose was to contribute to the safe use of biotechnology and reduce the potential risk associated to LMO use on biodiversity and human and animal health.
The structure of these projects comprised seven components in Bhutan, eight in Lao PDR and six in Mongolia. Table 2, 3 and 4 summarize the components per country and list the outcome and/or outputs the projects intended to achieve.

Table 2 – Projects components/outcomes and outputs – Bhutan

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline established for information on the safe use of biotechnology in Bhutan through a stocktaking analysis.</td>
<td>Inventory of current national human, technical and institutional capacities to implement a comprehensive biosafety management system. Accurate information on how Biosafety can be harmonized with National Laws, policies and plans, and built into existing Monitoring and Enforcement systems. Biosafety systems are consistent with national priorities on gender mainstreaming, and human rights, including participation by all sectors in decision-making.</td>
</tr>
<tr>
<td>Biosafety integrated and incorporated into National Priorities on poverty reduction and environment, as well as sectoral action plans and strategies, in conformity with Bhutan’s Tenth Plan.</td>
<td>Biosafety policy approved &amp; implemented by Government by end of 2010. Biosafety policy integrated into the Tenth Plan and reflected in the National Priorities, and sectoral action plans by end-2011.</td>
</tr>
<tr>
<td>A workable system for handling requests, carrying out risk assessment, and decision making for LMOs in place that reflects the priorities of the Tenth National Plan.</td>
<td>A fully functional administrative system for handling requests for LMOs. A fully functional system for risk assessment and decision-making. An efficient system for handling, storing and exchanging information on biosafety in place under the nBCH.</td>
</tr>
<tr>
<td>A workable and effective national system for monitoring, inspections &amp; enforcement in place, including monitoring of socio-economic impacts, that is consistent with National Priority on environment and disaster management.</td>
<td>Fully functional and effective inspection, monitoring and enforcement system in place in BAFRA. Strengthened BAFRA laboratories able to detect LMOs. Emergency response procedures (ERP) established &amp; made operational by BAFRA, the NEC and relevant Govt agencies.</td>
</tr>
<tr>
<td>A workable and effective national system for public awareness, education and participation in decision making for LMOs in place, in support of the National Priority on good governance.</td>
<td>Fully functional system for access to, and sharing of information in place in Bhutan by end of 2011, inter alia through the establishment of a national BCH under the BCH project. Strengthened system for public participation in decision-making on LMOs in place.</td>
</tr>
<tr>
<td>Enhanced regional cooperation on biosafety in SAARC, as well as sharing of experiences with other NBF Implementation projects globally:</td>
<td>Technical expertise, decision-making tools, training activities and materials for training and outreach with other countries in SAARC. Alignment of biosafety policies, regional mechanisms and common formats for sharing of information amongst SAARC countries on biosafety. Establish networks established with other Implementation project teams for sharing experiences, lessons &amp; best practices.</td>
</tr>
</tbody>
</table>

Table 3 – Projects components and expected outcomes and outputs – Lao PDR

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Expected Outcomes</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stocktaking analysis</td>
<td>Updated information on status and capacity for biotechnology &amp; biosafety management in the country</td>
<td>A clear national policy encompassing biotechnology, biosafety and national development is developed within the first year of project initiation by the NEA and line agencies. A status and strategy paper on biosafety cum biotech. R&amp;D in Lao PDR prepared by the National Coordination Committee (NCC) and NEA, within 6 months after completion of stocktaking exercise.</td>
</tr>
<tr>
<td>2. National plan (policy) implementation</td>
<td>Biosafety intergrated into national development policy and plans</td>
<td>A National Biotechnology Strategy and Action Plan (NBSAP) for 2011-2015 is jointly developed by NEA and partners to implement the Biotech. &amp; Biosafety policy by 2010. Biosafety &amp; biotech. are executed in national and sectoral plans and strategies by line agencies by 2011. Biosafety Law which is supported by other national Laws and is compliant with CPB is adopted by 2012. Legal personnel are trained in the operation of the Biosafety regulatory regime by</td>
</tr>
<tr>
<td>Project Components</td>
<td>Expected Outcomes</td>
<td>Expected Outputs</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>3. Regulatory regime</td>
<td>Regulatory regime to complement other national laws and compliant with CPB Regulatory regime strengthened and consolidated</td>
<td>By 2012, the Prime Minister’s Decree will ensure that the legally-binding Biosafety Regulations will come into force. By 2011, voluntary instruments like guidelines and manuals are developed by NEA and relevant agencies. By 2010, legal personnel are trained in at least 2 workshops organized by the NPC and NEA on drafting secondary and tertiary legislations.</td>
</tr>
<tr>
<td>4. Handling requests</td>
<td>An efficient administrative structure for biosafety Enhanced institutional arrangement for handling requests.</td>
<td>By 2009, institutional arrangement for handling requests is made functional by NCC/NEA and relevant line agencies. By 2009, the Scientific Advisory Committee (SAC) for RA and RM is appointed with trained members by NEA. By 2009, technical tools &amp; documents to assist decision making are developed by NCA. By 2009, responsibilities of various agencies are clearly defined by NCA and National Authorities on Biosafety. A functional and integrated administrative system at institutional level is in place for handling requests within first 12 months of project life. Members of all SACs are appointed by NCA/NEA and trained by 2009. A transparent decision making process is established within first year of project by NEA/NCA. By 2009, tools, training manual and technical documents are developed by NEA/NCA. By 2009, a mechanism for public participation in decision making is established within the NEA/NCA.</td>
</tr>
<tr>
<td>5. System for 'follow-up' activities</td>
<td>Strengthened capacity for monitoring, enforcement and inspection Better enforcement and compliance to national regulatory regime.</td>
<td>By 2011, human and infrastructural resources for monitoring, inspection, enforcement and LMO detection are strengthened in Lao PDR by NCAs. By 2010, an effective monitoring strategy comprising methodology, workflow and schedule is set up by NCAs. By 2011, relevant staff are trained and equipped with appropriate tools by NCAs. Technical guidelines and checklists are developed by NEA/NCAs and distributed to relevant personnel by 2010. By 2010, information is compiled on the biology and distribution of rice and other important crops in Lao PDR by NEA/NCAs. By 2011, indicator organisms and parameters are identified for monitoring environmental impact caused by planting GM-rice by SAC. Strategy to apply GM-rice with minimal negative impact on the environment is devised by SAC by 2011. By 2010, emergency response plan (ERP) is developed by SAC/NCA for accidental or unauthorized release.</td>
</tr>
<tr>
<td>6. Public education, awareness and participation</td>
<td>Enhanced public awareness in biotechnology and biosafety matters Active public participation in decision making</td>
<td>By 2009, a public-friendly information access system is set up by NEA. By 2010, biosafety education and awareness materials are developed by NEA and partners. By 2011, secondary and tertiary educational curricula contain biosafety. By 2010, a platform for 2-way public participation is set up by NEA/NCAs. By 2010, strategy for public awareness, education and participation is developed by NEA/NCAs. By 2010, platform for public participation in decision-making is developed by NEA. By 2010, entry points are identified by NCC/NEA/SAC for feedback from the public in decision making. By 2010, decisions on LMOs are publicized and accessible to the public by NEA via the BCH.</td>
</tr>
<tr>
<td>7. Project Review &amp; Evaluation, and Audit</td>
<td>Checks and balance for project implementation</td>
<td></td>
</tr>
<tr>
<td>8. Regional Networking</td>
<td>Enhanced Regional cooperation</td>
<td>By 2010, formats for info exchange on RA&amp;RM will be agreed between ASEAN countries. Lessons and best practices will be identified and shared between ASEAN countries throughout project cycle and beyond.</td>
</tr>
</tbody>
</table>

Table 4 – project components, expected outcomes and outputs - Mongolia
1. Policy and legal aspects for development of a National Biosafety Program

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Review of Mongolian policy and legal framework with respect to implementation of the Law on LMO.</td>
<td>1.1.1 An analysis of what implementing regulations are needed to make the Law on LMO (2007) operational.</td>
</tr>
<tr>
<td>1.2 Gaps in national laws in relation to biosafety are identified and addressed</td>
<td>1.2.1 Regulations to implement the Law on LMOs are prepared and linked to environmental governance.</td>
</tr>
<tr>
<td>1.2.2 Biosafety Program is developed and integrated into the Environmental Framework Law and NBF within national strategies.</td>
<td></td>
</tr>
</tbody>
</table>

2. Capacity building in human resource for implementation of a Biosafety Program

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Strengthened human resource in administration and decision making for implementation of biosafety program.</td>
<td>2.1.1 Training organized for decision makers. Staff trained in administrative aspect of Biosafety implementation, including risk assessment and risk management, decision making and risk communication.</td>
</tr>
<tr>
<td>2.2 Coordinated decision making on LMOs</td>
<td>2.2.1 Technical manuals on decision making procedure are prepared.</td>
</tr>
<tr>
<td>2.3 An effective mechanism for monitoring and inspection to ensure compliance to Law on LMOs</td>
<td>2.3.1 Organizing training for enforcement and monitoring officials.</td>
</tr>
</tbody>
</table>

3. Capacity strengthening at institutions for implementation of a Biosafety Program

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Strengthened institutional arrangement for effective implementation of a Biosafety Program</td>
<td>3.1.1 Key professional institutions to be strengthened are identified.</td>
</tr>
<tr>
<td>3.2 Enhanced institutional infrastructure to facilitate operation of the Biosafety Program</td>
<td>3.1.2 Strengthening the reference laboratory</td>
</tr>
<tr>
<td>3.3 Improved coordination between institutions for Biosafety implementation</td>
<td>3.2.1 Training for technicians and researchers in LMO detection and verification of LMOs for regulatory compliance.</td>
</tr>
<tr>
<td>3.3.1 Setting clear roles and responsibilities by MOU between collaborating institutions</td>
<td></td>
</tr>
</tbody>
</table>

4. Public awareness and public participation in matters related to Living Modified Organisms (LMOs)

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 A comprehensive public awareness and participation strategy on biosafety that is linked to the national environmental policy/program and Law on LMOs.</td>
<td>4.1.1 A strategy for public awareness and participation in decision making related to LMOs.</td>
</tr>
<tr>
<td>4.2 Publishing materials on biosafety in different media</td>
<td>4.2.1 Special educational materials for schools and colleges.</td>
</tr>
<tr>
<td>4.3 Trainings, lectures,info days, public debates</td>
<td>4.2.2 Outreach materials for target groups.</td>
</tr>
<tr>
<td>4.3.1 Setting clear roles and responsibilities by MOU between collaborating institutions</td>
<td></td>
</tr>
</tbody>
</table>

5. Establishment of a National and Regional networking system for Biosafety

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Cost effective pooling of regional experts and resources, cooperation between R &amp; D institutions and regulatory bodies</td>
<td>5.1.1 A database on national experts in crop science and biotechnology.</td>
</tr>
<tr>
<td>5.1.2 A network among national and regional crop science and biosafety experts.</td>
<td></td>
</tr>
</tbody>
</table>

6. Project audit, Monitoring and Evaluation cost

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Checks are in place to ensure that project implementation is according to workplan</td>
<td>6.1.1 Annual audit reports</td>
</tr>
<tr>
<td>6.1.2 Mid-term review</td>
<td>6.1.3 End of project evaluation</td>
</tr>
</tbody>
</table>

Source: project documents and result framework

4. Executing Arrangements
The *Implementing Agency* for the three projects was the United Nations Environment Programme (UNEP). In this capacity, UNEP had overall responsibility for the implementation of the projects, project oversight, technical support and co-ordination with other GEF projects.

In Bhutan, the Bhutan Agriculture and Food Regulation Authority (BAFRA), designated as the National Competent Authority by the Government of Bhutan under the NBF, was the National Executing Agency for this project. In implementing the project, BAFRA was supposed to work closely with the National Environment Commission (NEC), which is the focal point for Bhutan to the Cartagena protocol on Biosafety. In Lao PDR, the National Authority for Science and Technology (NAST), the focal point to the CPB, was the National Competent Authority (NCA) as well as the National Executing Agency (NEA) for this project. The Ministry of Nature, Environment and Tourism, the focal point to the CPB, was the National Competent Authority (NCA) as well as the National Executing Agency (NEA) for this project. The NEAs were responsible for working on behalf of the respective governments to manage the project, ensuring that the objectives would be met by the end of the project. The NCA were also responsible to provide the necessary scientific, technical, financial and administrative support to the project, working in close cooperation with relevant government agencies, the scientific community and the public.

The National Project Coordinator was responsible for the overall co-ordination, management and supervision of all aspects of the National Project. He/she had to report to the National Co-ordinating Committee and UNEP, and liaise closely with the chair and members of the National Coordinating Committee and National Executing Agency in order to coordinate the work plan for the National Project. He/she was responsible for all substantive, managerial and financial reports from the National Project. He/she had to provide overall supervision for any staff in the NBF Team as well as guiding and supervising all other staff appointed for the execution of the various National Project components. Bhutan and Mongolia also appointed a National Project Director, a government employee with the responsibility to provide policy advice and overall direction to the project, as well as coordinating project activities with relevant government agencies.

Bhutan established a Project Steering Committee, while Lao PDR and Mongolia established a National Co-ordinating Committee (NCC). These bodies were established by the National Executing Agencies (NEAs) to advise and guide the implementation of the projects. These committees should have included representations of all government agencies with mandates relevant to the Cartagena Protocol on Biosafety and representations from the private and public sectors. They were intended to be multi-disciplinary and multi-sectoral, covering all fields relevant to the Cartagena Protocol on Biosafety.

### 5. Project Cost and Financing

The three projects fall in the Middle-size Project (MSP) category. They were expected to mobilize $854,000 (Bhutan), $505,000 (Lao PDR) and $335,000 (Mongolia) in co-financing, mostly from government sources. The estimated projects costs at design stage and associated funding sources are presented in Table 5, 6 and 7.

#### Table 5. Estimated project cost in Bhutan (US $)

<table>
<thead>
<tr>
<th>Component</th>
<th>GEF Financing</th>
<th>Government contribution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stocktaking</td>
<td>29,500</td>
<td>36,000</td>
<td>55,500</td>
</tr>
<tr>
<td>2. Integration into National plans</td>
<td>30,500</td>
<td>40,000</td>
<td>80,500</td>
</tr>
<tr>
<td>3. Regulatory regime</td>
<td>102,000</td>
<td>90,000</td>
<td>192,000</td>
</tr>
<tr>
<td>4. Handling requests</td>
<td>125,000</td>
<td>180,000</td>
<td>305,000</td>
</tr>
<tr>
<td>5. Monitoring</td>
<td>333,000</td>
<td>248,000</td>
<td>581,000</td>
</tr>
<tr>
<td>6. Public participation</td>
<td>97,000</td>
<td>112,000</td>
<td>209,000</td>
</tr>
<tr>
<td>7. Regional cooperation</td>
<td>62,000</td>
<td>38,000</td>
<td>100,000</td>
</tr>
<tr>
<td>8. Project monitoring &amp; evaluation</td>
<td>10,000</td>
<td>30,000</td>
<td>40,000</td>
</tr>
</tbody>
</table>
9. Project Management

<table>
<thead>
<tr>
<th>Component</th>
<th>GEF Financing</th>
<th>Government contribution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stocktaking analysis</td>
<td>12,500</td>
<td>3,000</td>
<td>15,500</td>
</tr>
<tr>
<td>2. National plan (policy)</td>
<td>70,000</td>
<td>49,000</td>
<td>119,000</td>
</tr>
<tr>
<td>3. Regulatory regime</td>
<td>140,500</td>
<td>110,000</td>
<td>250,500</td>
</tr>
<tr>
<td>4. Handling requests</td>
<td>144,000</td>
<td>50,000</td>
<td>194,000</td>
</tr>
<tr>
<td>5. System for ‘follow-up’ activities</td>
<td>350,000</td>
<td>123,000</td>
<td>473,000</td>
</tr>
<tr>
<td>6. Public education, awareness and participation</td>
<td>106,000</td>
<td>56,000</td>
<td>162,000</td>
</tr>
<tr>
<td>7. Regional Networking and meetings</td>
<td>63,000</td>
<td>3,600</td>
<td>66,600</td>
</tr>
<tr>
<td>8. Project Management, Review &amp; Evaluation, and Audit</td>
<td>109,000</td>
<td>110,400</td>
<td>219,400</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>995,000</strong></td>
<td><strong>505,000</strong></td>
<td><strong>1,500,000</strong></td>
</tr>
</tbody>
</table>

Source: project document, agency fee of $86,900 not included

Table 7. Estimated project cost in Mongolia

<table>
<thead>
<tr>
<th>Component</th>
<th>GEF Financing</th>
<th>Government contribution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Policy and legal aspects for development of a National Biosafety Program</td>
<td>38,000</td>
<td>10,000</td>
<td>48,000</td>
</tr>
<tr>
<td>2. Capacity building in human resource for implementation of a Biosafety Program</td>
<td>108,000</td>
<td>60,000</td>
<td>168,000</td>
</tr>
<tr>
<td>3. Capacity strengthening at institutions for implementation of a Biosafety Program</td>
<td>165,000</td>
<td>125,000</td>
<td>290,000</td>
</tr>
<tr>
<td>4. Public awareness and public participation in matters related to Living Modified Organisms (LMOs)</td>
<td>0</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>5. Establishment of a National and Regional networking system for Biosafety</td>
<td>14,000</td>
<td>10,000</td>
<td>24,000</td>
</tr>
<tr>
<td>6. Project Management, audit, Monitoring and Evaluation cost</td>
<td>53,000</td>
<td>30,000</td>
<td>83,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>379,300</strong></td>
<td><strong>335,000</strong></td>
<td><strong>714,300</strong></td>
</tr>
</tbody>
</table>

Source: project document (appendices 1 – 2), agency fee of $37,930 not included

6. Implementation Issues

The Mid Term Reviews (MTRs) were originally scheduled for September 2011 in Lao PDR, June 2012 in Bhutan and January 2013 in Mongolia. Internal reviews were carried out by the UNEP Task Manager in September 2012 in Lao PDR and August 2013 in Bhutan. No review was carried out in Mongolia as it was considered that the project was progressing well and monitoring tools like the PIRs were providing sufficient guidance. The evaluation should consider the extent to which the MTR recommendations for Bhutan and Lao PDR were taken into account and acted upon by the relevant stakeholders.

In Bhutan, the project was developed in 2006. However, it was only submitted under the GEF 4 portfolio and it started being implemented in 2010, after receiving the necessary approvals. Many changes occurred during this period. The project could therefore not follow the work plan as described in the document. The change in some development
policies of the government also affected the outcome of the project. For example, the project was supposed to implement the 2006 biosafety draft, however, the changes created a need to have a biosafety act that could bring other related rules and regulations under one umbrella. The evaluation should assess the extent suitable adaptive management practices were put in place once the project implementation got underway.

In Mongolia, the implementation of the project seems to have run smoothly. However, changes in government officials posed some challenges while the fluctuation of the US dollar, which caused an increase in costs, reduced the project budget. The evaluation should assess the extent to which the project was successful in maintaining a high level of country ownership notwithstanding the changes in government officials and whether all outcomes could be delivered as required but with a reduced budget.

In Lao PDR, the project suffered a one year delay, after a satisfactory first year of execution, due to unplanned institutional changes including setting up a new Ministry with new implementing agency. The MTR highlighted a general need to fast track activities. In particular, it stressed the need to use the available draft legislation as a basis for implementation, instead of waiting for formal approval. It also highlighted the need to quickly roll out the public awareness campaign. The evaluation should assess the extent to which activities were expedited and whether suitable adaptive management measures were introduced.

Objective and Scope of the Evaluations

In line with the UNEP Evaluation Policy\(^\text{20}\), the UNEP Evaluation Manual\(^\text{21}\) and the Guidelines for GEF Agencies on Conducting Terminal Evaluations\(^\text{22}\), the Terminal Evaluations of the Projects “Implementation of Bhutan National Biosafety Framework”, “Support the implementation of National Biosafety for Lao PDR”, “Capacity Building for Biosafety Implementation for Mongolia” will be undertaken upon completion of the project (Bhutan, Mongolia) or immediately before the completion of the project (Lao PDR) to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluations have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the GEF and their executing partners – the National Executing Agencies and the national partners in particular. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation. It will focus on the following sets of key questions, based on the projects’ expected outcomes, which may be expanded by the consultants as deemed appropriate:

- To what extent were the projects able to support Bhutan, Mongolia and Lao PDR in establishing a national biosafety framework in accordance with national development priorities and international obligations?
- To what extent were the projects able to assist Bhutan, Mongolia and Lao PDR to establish and consolidate a fully functional and responsive regulatory regime in line with the Cartagena Protocol and national needs and priorities?
- To what extent were the projects able to assist Bhutan, Mongolia and Lao PDR to establish and consolidate a functional national system for handling requests, perform risk assessments, testing of GMOs, decision-making and performing administrative tasks?
- To what extent were the projects able to assist Bhutan, Mongolia and Lao PDR to establish and consolidate a functional national system for "follow-up", namely monitoring of environmental effects and enforcement?
- To what extent were the projects able to assist Bhutan, Mongolia and Lao PDR to establish and consolidate a functional national system for public awareness, education, participation and access to information?

Overall Approach and Methods

The Terminal Evaluations of the Projects “Implementation of Bhutan National Biosafety Framework”, “Support the implementation of National Biosafety for Lao PDR”, “Capacity Building for Biosafety Implementation for Mongolia” will be conducted by an independent consultant under the overall responsibility and management of the UNEP Evaluation Office (Nairobi), in consultation with the UNEP Task Manager (Nairobi), and the UNEP Fund Management Officer at UNEP/DEPI (Nairobi).

They will be in-depth evaluations using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts.

The findings of the evaluation will be based on the following:

- A desk review of project documents and others including, but not limited to:
- Relevant background documentation, inter alia UNEP and GEF-4 policies, strategies and programmes pertaining to biosafety at the time of the project’s approval;
- Project design documents; annual Work Plans and Budgets or equivalent, revisions to the logical framework and project financing;
- Project reports such as progress and financial reports from the executing partners; National Coordination Committee meeting minutes; annual Project Implementation Reviews and relevant correspondence;
- Documentation related to project outputs;
- Relevant material published, e.g. in journals and books
- Interviews with:
  - UNEP Task Manager and Fund Management Officer and other relevant staff in UNEP as necessary;
  - Interviews with project management, National Coordination Committee and key partners to the extent possible;
  - Stakeholders involved with this project, including NGOs, private sector, academia, national organizations and institutes, including National Competent Authorities, regional and international organizations and civil society representatives to the extent possible;
  - Relevant staff of GEF Secretariat and
  - Representatives of the government and other organisations (if deemed necessary by the consultant).
- Country visits. The evaluation consultant will schedule a visit to each country to interview relevant stakeholders and the project team. To the extent possible, the visits should take place back to back to limit the amount of travel required.

**Key Evaluation principles**

Evaluation findings and judgements should be based on sound evidence and analysis, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, the single source will be mentioned. Analysis leading to evaluative judgements should always be clearly spelled out.

The evaluation will assess the project with respect to a minimum set of evaluation criteria grouped in six categories: (1) *Strategic Relevance*; (2) *Attainment of objectives and planned result*, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (3) *Sustainability and replication*; (4) *Efficiency*; (5) *Factors and processes affecting project performance*, including preparation and readiness, implementation and management, stakeholder participation and public awareness, country ownership and driven-ness, financial planning and management, UNEP supervision and backstopping, and project monitoring and evaluation; and (6) *Complementarity with the UNEP strategies and programmes*. The evaluation consultants can propose other evaluation criteria as deemed appropriate.
Ratings. All evaluation criteria will be rated on a six-point scale. However, complementarity of the project with the UNEP strategies and programmes is not rated. Annex 3 provides detailed guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.

In attempting to attribute any outcomes and impacts to the project, the evaluator should consider the difference between what has happened with and what would have happened without the project. This implies that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. This also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions and trends is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

As these are terminal evaluations, particular attention should be given to learning from the experience. Therefore, the “Why?” question should be at front of the consultant’s minds all through the evaluation exercise. This means that the consultant needs to go beyond the assessment of “what” the project performance was, and make a serious effort to provide a deeper understanding of “why” the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category 3). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultants to explain “why things happened” as they happened and are likely to evolve in this or that direction, which goes well beyond the mere review of “where things stand” today.

**Evaluation criteria**

**Strategic relevance**

The evaluations will assess, in retrospect, whether the projects’ objectives and implementation strategies were consistent with: i) Sub-regional environmental issues and needs; ii) the UNEP mandate and policies at the time of design and implementation; and iii) the GEF Biodiversity focal area, strategic priorities and operational programme(s).

The evaluations will also assess whether the projects’ objectives were realistic, given the time and budget allocated to the project, the baseline situation and the institutional context in which the project was to operate.

**Achievement of Outputs**

The evaluation will assess, for each component, the project’s success in producing the programmed results as presented in Table 2, 3 and 4 above, both in quantity and quality, as well as their usefulness and timeliness. The evaluation should briefly explain the degree of success of the projects in achieving their different outputs, cross-referencing as needed to more detailed explanations provided under Section F (which covers the processes affecting attainment of project objectives).

**Effectiveness: Attainment of Objectives and Planned Results**

The evaluations will assess the extent to which the project’s objectives were effectively achieved or are expected to be achieved.

The evaluations will reconstruct the Theory of Change (ToC) of the projects based on a review of project documentation and stakeholder interviews. The ToC of a project depicts the causal pathways from project outputs (goods and services delivered by the project) over outcomes (changes resulting from the use made by key stakeholders of project outputs) towards impact (changes in environmental benefits and living conditions). The ToC will also depict any intermediate changes required between project outcomes and impact, called intermediate states. The ToC further defines the external factors that influence change along the pathways, whether one result can lead to the next. These external factors are either drivers (when the project has a certain level of control) or assumptions (when the project has no control).
The assessment of effectiveness will be structured in three sub-sections:

1. Evaluation of the achievement of direct outcomes as defined in the reconstructed ToC. These are the first-level outcomes expected to be achieved as an immediate result of project outputs.

2. Assessment of the likelihood of impact using a Review of Outcomes to Impacts (ROtI) approach as summarized in Annex 6 of the TORs. Appreciate to what extent the project has to date contributed, and is likely in the future to further contribute to changes in stakeholder behaviour as a result of the project’s direct outcomes, and the likelihood of those changes in turn leading to changes in the natural resource base, benefits derived from the environment and human living conditions.

3. Evaluation of the achievement of the formal project overall objective, overall purpose, goals and component outcomes using the project’s own outcomes as presented in original logframe and any later versions of the logframe. This sub-section will refer back where applicable to sub-sections (a) and (b) to avoid repetition in the report. To measure achievement, the evaluation will use as much as appropriate the indicators for achievement proposed in the Logical Framework Matrix (Logframe) of the project, adding other relevant indicators as appropriate. Briefly explain what factors affected the project’s success in achieving its objectives, cross-referencing as needed to more detailed explanations provided under Section F.

Sustainability and replication

Sustainability is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition sustainability of benefits. The evaluations should ascertain to what extent follow-up work has been initiated and how project results will be sustained and enhanced over time. The reconstructed ToC will assist in the evaluation of sustainability.

Four aspects of sustainability will be addressed:

- **Socio-political sustainability.** Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main national and regional stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? To what extent was the project able to reach out to the stakeholders identified in the design phase (academia, private sector, civil society etc)?

- **Financial resources.** To what extent are the continuation of project results and the eventual impact of the project dependent on continued financial support? What is the likelihood that adequate financial resources will be or will become available to implement the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?

- **Institutional framework.** To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources?

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23 Those resources can be from multiple sources, such as the public and private sectors, income generating activities, other development projects etc.
• **Environmental sustainability.** Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? Are there any foreseeable negative environmental impacts that may occur as the project results are being up-scaled?

**Catalytic role and replication.** The catalytic role of GEF-funded interventions is embodied in their approach of supporting the creation of an enabling environment and of investing in pilot activities which are innovative and showing how new approaches can work. UNEP and the GEF also aim to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluations will assess the catalytic role played by these projects, namely to what extent the projects have:

- **catalyzed behavioural changes** in terms of use and application by the relevant stakeholders of: i) technologies and approaches show-cased by the demonstration projects; ii) strategic programmes and plans developed; and iii) assessment, monitoring and management systems established at national and regional level;
- provided **incentives** (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour;
- contributed to **institutional changes.** An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in the regional and national demonstration projects;
- contributed to **policy changes** (on paper and in implementation of policy);
- contributed to sustained follow-on financing (catalytic financing) from Governments, the GEF or other donors;
- created opportunities for particular individuals or institutions (“champions”) to catalyze change (without which the project would not have achieved all of its results).

**Replication,** in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluations will assess the approach adopted by the projects to promote replication effects and appreciate to what extent actual replication has already occurred or is likely to occur in the near future. What are the factors that may influence replication and scaling up of project experiences and lessons?

**Efficiency**

The evaluations will assess the cost-effectiveness and timeliness of project execution. They will describe any cost- or time-saving measures put in place in attempting to bring the project as far as possible in achieving its results within its programmed budget and (extended) time. They will also analyse how delays have affected project execution, costs and effectiveness. Wherever possible, costs and time over results ratios of the projects will be compared with that of other similar interventions and to each other’s. The evaluations will give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency, all within the context of project execution.

To what extent were the projects efficiently managed and what lessons can be learnt for future projects? To what extent did any challenges have an impact on the delivery of project outcomes and the achievement of the project objective?

**Factors and processes affecting project performance**

**Preparation and readiness.** This criterion focusses on the quality of project design and preparation. Were project stakeholders adequately identified? Were the project’s objectives and components clear, practicable and feasible

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24 Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the project. The term also applies to those potentially adversely affected by the project.
within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.? Were GEF environmental and social safeguards considered when the project was designed?25 Were sufficient components integrated into the project design to ensure the obtaining of commitment of government representatives? Were sufficient provisions integrated into project design to minimise delays in implementation? Were the projects designed with the needs of the countries in mind and to what extent where they aligned to national priorities?

**Project implementation and management.** This includes an analysis of implementation approaches used by the project, its management framework, the project’s adaptation to changing conditions (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluations will:

- Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed and were effective in delivering project outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?
- Evaluate the effectiveness and efficiency of project management by the National Executing Agencies and how well the management was able to adapt to changes during the life of the project.
- Assess the role and performance of the units and committees established and the project execution arrangements at all levels.
- Assess the extent to which project management, as well as national partners, responded to direction and guidance provided by the National Coordination Committee and UNEP supervision recommendations.
- Identify operational and political / institutional problems and constraints that influenced the effective implementation of the project, and how the project partners tried to overcome these problems. How did the relationship between the project management team and the national coordinators develop?
- Assess the extent to which MTR recommendations were followed in a timely manner.
- Assess the extent to which the project implementation met GEF environmental and social safeguards requirements.

**Stakeholder participation and public awareness.** The term stakeholder should be considered in the broadest sense, encompassing project partners, government institutions, private interest groups, local communities etc. The TOC analysis should assist the evaluators in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathway from activities to achievement of outputs and outcomes to impact. The assessments will look at three related and often overlapping processes: (1) information dissemination between stakeholders, (2) consultation between stakeholders, and (3) active engagement of stakeholders in project decision making and activities. The evaluations will specifically assess:

- the approach(es) used to identify and engage stakeholders in project design and implementation. What were the strengths and weaknesses of these approaches with respect to the project’s objectives and the stakeholders’ motivations and capacities? What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during design and implementation of the project?
- the degree and effectiveness of any public awareness activities that were undertaken during the course of implementation of the project; or that are built into the assessment methods so that public awareness can be raised at the time the assessments will be conducted;

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25 http://www.thegef.org/gef/node/4562
• how the results of the project (strategic programmes and plans, monitoring and management systems, sub-regional agreements etc.) promote participation of stakeholders in decision making.
• Country ownership and driven-ness. The evaluation will assess the performance of national partners involved in the project, as relevant:
• In how far has the national partner assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received from the various public institutions involved in the project and the timeliness of provision of counter-part funding to project activities?
• To what extent has the national and regional political and institutional framework been conducive to project performance?
• How responsive were the national partners to the National Executing Agencies coordination and guidance, and to UNEP supervision?

Financial planning and management. Evaluation of financial planning requires an assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project’s lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluations will:

• Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;
• Appreciate other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;
• Present to what extent co-financing has materialized as expected at project approval (see Table 1, 4, 5 and 6). Report country co-financing to the project overall, and to support project activities at the national level in particular. The evaluations will provide a breakdown of final actual costs and co-financing for the different project components (see tables in Annex 4).
• Describe the resources the projects have leveraged since inception and indicate how these resources are contributing to the projects’ ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO’s, foundations, governments, communities or the private sector.
• Analyse the effects on project performance of irregularities (if any) in procurement, use of financial resources and human resource management, and the measures taken by the National Executing Agencies or UNEP to prevent such irregularities in the future. Appreciate whether the measures taken were adequate.

UNEP supervision and backstopping. The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UNEP has a major contribution to make. The evaluators should assess the effectiveness of supervision and administrative and financial support provided by UNEP including:

• The adequacy of project supervision plans, inputs and processes;
• The emphasis given to outcome monitoring (results-based project management);
• The realism and candour of project reporting and ratings (i.e. are PIR ratings an accurate reflection of the project realities and risks);
• The quality of documentation of project supervision activities; and
• Financial, administrative and other fiduciary aspects of project implementation supervision.

Monitoring and evaluation. The evaluations will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the
assumptions and risks identified in the project document. The evaluations will appreciate how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:

- **M&E Design.** Projects should have sound M&E plans to monitor results and track progress towards achieving project objectives. An M&E plan should include a baseline (including data, methodology, etc.), SMART indicators and data analysis systems, and evaluation studies at specific times to assess results. The time frame for various M&E activities and standards for outputs should have been specified. The evaluators should use the following questions to help assess the M&E design aspects:
  - Quality of the project logframe (original and possible updates) as a planning and monitoring instrument; analyse, compare and verify correspondence between the original logframe in the Project Document, possible revised logframes and the logframe used in Project Implementation Review reports to report progress towards achieving project objectives;
  - SMART-ness of indicators: Are there specific indicators in the logframe for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?
  - Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable?
  - Arrangements for monitoring: Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the frequency of various monitoring activities specified and adequate? In how far were project users involved in monitoring?
  - Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?
  - Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

- **M&E Plan Implementation.** The evaluation will verify that:
  - the M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period;
  - annual project reports and Progress Implementation Review (PIR) reports were complete, accurate and with well justified ratings;
  - the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs.

**Use of GEF Tracking Tools.** These are portfolio monitoring tools intended to roll up indicators from the individual project level to the portfolio level and track overall portfolio performance in focal areas. Each focal area has developed its own tracking tool\(^\text{26}\) to meet its unique needs. Agencies are requested to fill out these forms at CEO Endorsement (or CEO approval for MSPs) and submit these tools again for projects at mid-term and project completion. The evaluation will verify whether UNEP has duly completed the relevant tracking tool for this project, and whether the information provided is accurate.

**Complementarities with UNEP strategies and programmes**
UNEP aims to undertake GEF funded projects that are aligned with its own strategies. The evaluations should present a brief narrative on the following issues:

  - **Linkage to UNEP’s Expected Accomplishments and POW 2010-2011 and 2012-2013.** The UNEP MTS specifies desired results in six thematic focal areas. The desired results are termed Expected Accomplishments. Using

\(^\text{26}\) \url{http://www.thegef.org/gef/tracking_tools}
the completed ToC/ROtI analysis, the evaluation should comment on whether the project makes a tangible contribution to any of the Expected Accomplishments specified in the UNEP MTS. The magnitude and extent of any contributions and the causal linkages should be fully described. Whilst it is recognised that UNEP GEF projects designed prior to the production of the UNEP Medium Term Strategy 2010-2013 (MTS)\(^{27}\) would not necessarily be aligned with the Expected Accomplishments articulated in those documents, complementarities may still exist and it is still useful to know whether these projects remain aligned to the current MTS.

- **Alignment with the Bali Strategic Plan (BSP)**\(^{28}\). The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UNEP BSP.
- **Gender.** Ascertain to what extent project design, implementation and monitoring have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation. Appreciate whether the intervention is likely to have any lasting differential impacts on gender equality and the relationship between women and the environment. To what extent do unresolved gender inequalities affect sustainability of project benefits?
- **South-South Cooperation.** This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

**The Consultants’ Team**

For these evaluations, the evaluation team will consist of one consultant. The consultant should have experience in project evaluation. A Master’s degree or higher in the area of environmental sciences or a related field and at least 15 years’ experience in environmental management, with a preference for specific expertise in the area of biosafety and biodiversity is required.

By undersigning the service contract with UNEP/UNON, the consultant certifies that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, s/he will not have any future interests (within six months after completion of the contract) with the project’s executing or implementing units.

**Evaluation Deliverables and Review Procedures**

The evaluation consultant will prepare an evaluation for each country. The evaluator will start by preparing three inception reports (see Annex 2(a) of TORs for Inception Report outline) containing a thorough review of the project context, project design quality, a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule.

The review of design quality will cover the following aspects (see Annex 7 for the detailed project design assessment matrix):

- Strategic relevance of the project
- Preparation and readiness (see paragraph 25);
- Financial planning (see paragraph 30);
- M&E design (see paragraph 33(a));
- Complementarities with UNEP strategies and programmes (see paragraph 34);

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Sustainability considerations and measures planned to promote replication and upscaling (see paragraph 23).

The inception reports will also present a draft, desk-based reconstructed Theory of Change of the project. It is vital to reconstruct the ToC before the most of the data collection (review of reports, in-depth interviews, observations on the ground etc.) is done, because the ToC will define which direct outcomes, drivers and assumptions of the project need to be assessed and measured to allow adequate data collection for the evaluation of project effectiveness, likelihood of impact and sustainability.

The evaluation framework will present in further detail the evaluation questions under each criterion with their respective indicators and data sources. The evaluation framework should summarize the information available from project documentation against each of the main evaluation parameters. Any gaps in information should be identified and methods for additional data collection, verification and analysis should be specified.

The inception reports will also present a tentative schedule for the overall evaluation process, including a draft programme for the country visit and tentative list of people/institutions to be interviewed.

The inception reports will be submitted for review and approval by the Evaluation Office before the consultant travels to the field.

The main evaluation reports should be brief (no longer than 35 pages – excluding the executive summary and annexes), to the point and written in plain English. The evaluator will deliver high quality reports in English by the end of the assignment. The reports will follow the annotated Table of Contents outlined in Annex 1. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The reports will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The reports should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in a footnote or annex as appropriate. To avoid repetitions in the reports, the author will use numbered paragraphs and make cross-references where possible.

Review of the draft evaluation reports. The evaluation consultant will submit the zero draft reports latest three weeks after conducting the field visits to the UNEP EO and revise the drafts following the comments and suggestions made by the EO. Once a draft of adequate quality has been accepted, the EO will share this first draft reports with the UNEP Task Manager, who will ensure that the report does not contain any blatant factual errors. The UNEP Task Manager will then forward the first draft report to the other project stakeholders, in particular the national partners, for review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. It is also very important that stakeholders provide feedback on the proposed recommendations and lessons. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UNEP EO for collation. The EO will provide the comments to the evaluation team for consideration in preparing the final draft report.

The evaluation consultant will submit the final draft report no later than 2 weeks after reception of stakeholder comments. The consultant will prepare a response to comments, listing those comments not or only partially accepted that could therefore not or only partially be accommodated in the final report. The consultant will explain why those comments have not or only partially been accepted, providing evidence as required. This response to comments will be shared by the EO with the interested stakeholders to ensure full transparency.

Submission of the final Terminal Evaluation report. The final report shall be submitted by email to the Head of the Evaluation Office, who will share the report with the Director, UNEP/GEF Coordination Office and the UNEP/DEPI Task Manager. The Evaluation Office will also transmit the final report to the GEF Evaluation Office.

The final evaluation report will be published on the UNEP Evaluation Office web-site www.unep.org/eou. Subsequently, the report will be sent to the GEF Office of Evaluation for their review, appraisal and inclusion on the GEF website.
As per usual practice, the UNEP EO will prepare a quality assessment of the first draft and final draft report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against the criteria specified in Annex 4.

The UNEP Evaluation Office will assess the ratings in the final evaluation report based on a careful review of the evidence collated by the evaluation consultant and the internal consistency of the report. Where there are differences of opinion between the evaluator and UNEP Evaluation Office on project ratings, both viewpoints will be clearly presented in the final report. The UNEP Evaluation Office ratings are the final ratings that will be submitted to the GEF Office of Evaluation.

Logistical arrangement

These Terminal Evaluations will be undertaken by an independent evaluation consultant contracted by the UNEP Evaluation Office. The consultant will work under the overall responsibility of the UNEP Evaluation Office and will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultants’ individual responsibility to arrange for their travel, visa, obtain documentary evidence, plan meetings with stakeholders, organize field visits (if any), and any other logistical matters related to the assignment. The UNEP Task Manager and local partners will, where possible, provide logistical support (introductions, meetings, transport etc.) for the country visit, allowing the consultants to conduct the evaluation as efficiently and independently as possible.

Schedule of the evaluation (tentative)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start of the evaluation</td>
<td>1 September 2014</td>
</tr>
<tr>
<td>Inception reports</td>
<td>30 September 2014</td>
</tr>
<tr>
<td>Comments from Evaluation Office</td>
<td>10 October 2014</td>
</tr>
<tr>
<td>Field visits</td>
<td>20 October – 31 October 2014</td>
</tr>
<tr>
<td>Zero Draft reports</td>
<td>21 November 2014</td>
</tr>
<tr>
<td>Comments from Evaluation Office</td>
<td>29 November 2014</td>
</tr>
<tr>
<td>First draft reports</td>
<td>12 December 2014</td>
</tr>
<tr>
<td>Comments from stakeholders</td>
<td>5 January 2014</td>
</tr>
<tr>
<td>Final reports</td>
<td>17 January 2015</td>
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</tbody>
</table>

The consultant will be hired under an individual Special Service Agreement (SSA). There are two options for contract and payment: lumpsum or “fees only”.

Lumpsum: The contract covers both fees and expenses such as travel, per diem (DSA) and incidental expenses which are estimated in advance. The consultants will receive an initial payment covering estimated expenses upon signature of the contract.

Fee only: The contract stipulates consultant fees only. Air tickets will be purchased by UNEP and 75% of the DSA for each authorised travel mission will be paid up front. Local in-country travel and communication costs will be reimbursed on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

The payment schedule for the consultant will be linked to the acceptance of the key evaluation deliverables by the Evaluation Office:

- Final inception report: 20 percent of agreed total fee
- First draft main evaluation report: 40 percent of agreed total fee
- Final main evaluation report: 40 percent of agreed total fee

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In case the consultant is not able to provide the deliverables in accordance with these TORs, in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Head of the Evaluation Office until the consultant has improved the deliverables to meet UNEP’s quality standards. If the consultant fails to submit a satisfactory final product to UNEP in a timely manner, i.e. within one month after the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultant’s fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

**Submission of the final evaluation report:**

The final report shall be submitted by email to:

Mr. Michael Spilsbury, Chief
UNEP Evaluation Office
Email: michael.spilsbury@unep.org

The Head of Evaluation will share the report with the following persons:

Brennan Van Dyke
Director
UNEP/ GEF Coordination Office
Email: Brennan.Vandyke@unep.org

Shakira Khawaja
Fund Management Officer
UNEP/DEPI
Email: Shakira.Khawaja@unep.org

Alex Owusu Biney
Task Manager
UNEP/DEPI
Email: Alex.Owusu-Biney@unep.org

The final evaluation report will be published on the UNEP Evaluation Office web-site [www.unep.org/eou](http://www.unep.org/eou) and may be printed in hard copy.
### Annex 3

**MONGOLIA – LIST of PEOPLE MET (20-21-22/10/2014)**

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION &amp; INSTITUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. S. Bayarkhuu</td>
<td>Secretary General of the National Biosafety Committee (NBC), BCH Focal Point</td>
</tr>
<tr>
<td>Ms. J. Sonormaa</td>
<td>Project Officer, Min. of Env. &amp; Green Development (MEGD)</td>
</tr>
<tr>
<td>Ms. A. Zolzaya</td>
<td>Project Financial Officer, MEGD</td>
</tr>
<tr>
<td>Mr. A. Enkhbat</td>
<td>Head of Dept. of Technology &amp; Science / MEGD, CPB Focal Point, GEF Focal Point, member of the NBC</td>
</tr>
<tr>
<td>Mr. D. Batbold</td>
<td>Director of Division of International Cooperation / MEGD, UNEP Focal Point, CBP Focal Point</td>
</tr>
<tr>
<td>Mr. J. Oyunbileg</td>
<td>Public Health Institute, member of the NBC</td>
</tr>
<tr>
<td>Mr. Odgerel</td>
<td>Nat. University, Genetic Eng. Department, Consultant of the Project</td>
</tr>
<tr>
<td>Mr N. Chinggis</td>
<td>National TV director</td>
</tr>
<tr>
<td>Ms. T. Oyunsuren</td>
<td>Professor, Director of Lab. of Molecular Biology, Institute of Biology of the Mongolian Academy of Sciences –</td>
</tr>
<tr>
<td>Mr. T. Janchiv</td>
<td>Director of the Institute of Biology, Mongolian Academy of Sciences</td>
</tr>
<tr>
<td>Ms. Onon Yondon</td>
<td>Senior Officer MEGD</td>
</tr>
<tr>
<td>Mr Dorjgotov</td>
<td>Senior Officer MEGD</td>
</tr>
<tr>
<td>Ms L. Gerelmaa</td>
<td>Head of Department of Industry and Service of the General Agency for Specialised Inspection (Regulatory Agency of the Government of Mongolia)</td>
</tr>
<tr>
<td>Ms. V. Enkhchimeg –</td>
<td>Head of Dep. Biotechnology, School of Biological Resources, Mongolian University of Life Sciences</td>
</tr>
<tr>
<td>Ms. V. Bolormaa</td>
<td>Customs Officer (Food safety)</td>
</tr>
<tr>
<td>Mr. B. Arvinbayar</td>
<td>Member of the NBC, Mongolian Biotechnology Association (NGO)</td>
</tr>
</tbody>
</table>
Annex 4
BIBLIOGRAPHY

Documents consulted during the main evaluation phase

Mongolia:

- Terms of Reference of the Terminal Evaluation
- Project Document “Capacity Building for Biosafety Implementation for Mongolia” (GFL/2328-2716-4B95) and 15 Appendices
- From ANUBIS: Mid Term Review, PIR 2012, 2013 and 2014, Budget Revisions, Audit Report 2013, revised Work plans, PSC Minutes, Final Inventory, Terminal Documents
- “National Biosafety Framework”, MNE, GEF, UNEP, 2005
- “Mongolia and the GEF” (2013, from GEF Website)
- BCH Mongolia page (https://bch.cbd.int/about/countryprofile.shtml?country=mn)

Global:

- Cartagena Protocol on Biosafety (CPB)
- Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety
- Bali Strategic Plan for Technology Support and Capacity- building
- Status of capacity-building activities, UNEP/CBD/BS/COP-MOP/5/INF/9, September 2010
- Medium term strategy of UNEP 2010-13 “Environment for Development”
- Strategic plan of CPB 2011-20
- A Comparative Analysis of Experiences and Lessons from the UNEP-GEF Biosafety Projects, 2006, UNEP-GEF Biosafety Unit
- Guidance towards Implementation of National Biosafety Frameworks: Lessons Learned from the UNEP Demonstration Projects, 2008, UNEP-GEF Biosafety Unit
- Learning from experience, the global UNEP-GEF BCH Capacity building project, 2008, UNEP-GEF
- Public Participation and the Cartagena Protocol on Biosafety, A review for DFID and UNEP-GEF (IDS)
- Genetically Modified Organisms and Biosafety: A background paper for decision-makers and others to assist in consideration of GMO issues, IUCN, 2004
### Annex 5

**Project costs and co-financing tables**

**Project Costs (USD)**

<table>
<thead>
<tr>
<th>Component/sub-component</th>
<th>Estimated cost at design</th>
<th>Actual Cost</th>
<th>Expenditure ratio (actual/planned)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>714.300</td>
<td>714.300</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Co-financing**

<table>
<thead>
<tr>
<th>Co financing (Type/Source)</th>
<th>IA own Financing</th>
<th>Government</th>
<th>Other*</th>
<th>Total</th>
<th>Total Disbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Planned</td>
<td>Actual</td>
<td>Planned</td>
<td>Actual</td>
<td>Planned</td>
</tr>
<tr>
<td>Grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Credits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-kind support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>335.000</td>
<td>335.000</td>
<td>8.850 (UNDP)</td>
<td>335.000</td>
<td>343.850</td>
</tr>
</tbody>
</table>

* This refers to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.
Annex 6

CV profile of the Consultant (Camillo Risoli)

Camillo Risoli (Italy, 1953) is a seasoned international expert in rural development and environmental management. He has a long experience (more than 30 years) in the implementation, coordination and management of projects and programs in Africa and Latin America, with different donors and agencies. Capacity and Institution Building for Rural Development is his main area of expertise.

Camillo has worked as an expert, a chief technical adviser and an independent consultant for UN agencies (FAO, UNEP), Bi-lateral Cooperations (SDC – Swiss Cooperation, Italian cooperation, EC Delegations) and for International NGOs. He has been Team Leader in Long-Term Missions in Nicaragua (1980-82), Cape Verde (1986-96), Mozambique (1996-99) and Zimbabwe (2003-2005).

Food Security and Poverty Reduction have been at the core of his professional commitment, through Community-based projects and participatory actions, Organization & training of rural associations, Sustainable land use and agriculture, Partnership strengthening and networking (Public, Private, Civil Society) for decentralised and participatory local development.

Mainstreaming Environmental issues in Pro-Poor Strategies has been a main component of his action, through Soil & water conservation projects, Reforestation and agro-forestry initiatives, Watershed management and land use planning, Sustainable management of natural resources (soil, water, forests and bio-diversity).

Camillo has acquired a robust experience in advising on national policies and strategic planning for rural development, a solid background in PCM (Programme Cycle Management) and strong skills in Project Monitoring & Evaluation (M&E).

Since 2005, he works as an Independent Consultant and has carried out and led relevant Evaluation missions, such as the Mozambique National Action Plan for Food Security (FAO), the LADA Project - Land Degradation Assessment in Drylands - (FAO/UNEP-GEF) in Argentina and China, the Post-Conflict Rural Development in Ivory Coast (FAO/ADB), the setting of the M&E System for FAO/CLCPRO Program (Commission for Locust Control in Western Africa and Maghreb Region), the Biosafety National Frameworks Evaluation (UNEP-GEF) in Kenya, Namibia, Poland, Lithuania, Czech Republic and Slovakia, the terminal evaluation of the FAO Programme of Food Security through Commercialization in West Africa (Gambia, Guinea, Liberia, Senegal, Sierra Leone), the Evaluation of FAO’s Decentralization in Latin America & the Caribbean (2013).

Camillo has a graduate degree in Agricultural Sciences, a Post-Graduate Diploma in Environmental Management at London University and a PhD in Adult Education. He has published with FAO training manuals and methodological guides for trainers and extensionists.

Camillo is currently engaged in the creation of a small private company in partnership with farmers associations (out-growing scheme) for the development of a profitable value-chain of Aloe Vera in Cape Verde.
Annex 7

The UNEP/GEF projects of NBF implementation in Mongolia, Bhutan, Lao PDR\textsuperscript{29}: elements for a comparative analysis

- The concept and design of the three projects are similar. They basically are Institutional and Capacity Building projects aiming at creating and consolidating in-country conditions for the implementation of the National Biosafety Framework: a combination of policy, legal, administrative and technical instruments enabling the countries to manage the safe transfer, handling and use of living modified organisms (LMOs) from modern biotechnology.

- Socio-political, economic, geographical and environmental situations of the countries are very different. However, they share some notable elements that are relevant for GMOs management:
  
  a) the three countries are richly endowed in natural resources, pristine environments and biodiversity;
  b) all of them are landlocked countries, with somewhat porous borders;
  b) two of them (Mongolia and Bhutan) have big and powerful neighbors (Russia and China for Mongolia, China and India for Bhutan) with which they maintain strong economic and trade relations;
  d) the three countries import great part of the food and feed consumed internally, which, on the one hand, entails the need for adequate measures of control, inspection and detection, and, on the other hand, is raising increased interest for the use of GMOs in agriculture.

- Due to the above listed elements, the relevance of the projects is equally high for the three countries.

- The baseline situation of the three countries at the starting of the projects was quite different. Mongolia had already a national Biosafety Law (since 2007), while the other two countries had not. Bhutan was in a particular situation, due to a ministerial decree issued by the Ministry of Agriculture in 2000 that banned all imports of LMOs into the country (moratorium).

- As a consequence of the previous point, Mongolia project focused on the elaboration and implementation of a “National Biosafety Programme” (NBP), considered the pivotal instrument for the implementation of all programs and activities concerning Biosafety in the country. The NBP is a comprehensive instrument of public planning including Work plans (2014-2017, 2018-2021), Monitoring & Evaluation framework and a Budget. Moreover,

\textsuperscript{29} “Capacity Building for Biosafety Implementation for Mongolia”; “Implementation of the National Biosafety Framework of Bhutan”; “Support the implementation of National Biosafety for Lao PDR”
building upon the National Biosafety Law of 2007, the Project has largely contributed to the elaboration of five Regulations (General Regulations and specific Regulation on Inspection, Customs, Registration & Risk Assessment, Transportation), two of which already approved (Inspection and Customs) and three other at the final stage of their process of approval.

- **Bhutan and Lao PDR** have obviously focused on the elaboration and approval of the National Biosafety Laws, which occurred in both countries during 2014, with a strong impulse by the respective projects. The process leading to the adoption of the new Laws was, however, quite different between the two countries.

- In one case, **Bhutan**, the Project, while technically and methodologically supporting the discussions and the gradual revisions of the text, eventually leading to the Biosafety Act approved in November 2014, has, in a parallel way, acted “as if the law existed already”. As a matter of fact, the two main bodies established by the new Biosafety Law (the National Biosafety Commission / NBC with responsibility for strategic guidance and coordination, and the Technical Working Groups with advisory function) are the natural evolution of the implementing mechanisms set by the Project. They have already given evidence of meaningful participation and of strategic and technical capacities during the phase of the elaboration and discussion of the Law.

- **Lao PDR** had started the process of discussion and elaboration of the National Law well before (2004) and, after a complex and challenging process (also including a governmental reshuffling, the creation of new Ministries, a new NCA, a reshaped project team), eventually the National Biosafety Law was approved in February 2014. Due to the complex structure of the public administration and to the convoluted mechanisms of decision-making, the formal absence of a law hampered many related activities and represented a major obstacle to the smooth progress of Biosafety agenda in the country. After the adoption of the Law, the biosafety regulatory framework has been completed with the preparation of three draft Regulations (Secondary Law) and the elaboration and discussion of a draft National Biotechnology Strategy and Action Plan (NBSAP), which will permit to insert Biosafety into national plans and policies.

- The experience of the three projects shows how relevant socio-political conditions and governance mechanisms are for the implementation of National Biosafety Frameworks. On this regards, the three projects’ teams have responded with different assets and capabilities: capacity of coordination and partnership have been strong driving forces of the Mongolia team, flexibility and management adaptation have been strong assets of the Bhutan project, while resilience and strong motivation have been major assets of the Lao project team.

- Some interesting elements of analysis can also come from the observation of the different institutional frameworks of the three projects. Few lessons can be drawn by the Lao PDR experience on this aspect, due to the renewed institutional frame, while both Mongolia and Bhutan present two different institutional frames, each of them with strong and weak points.
• In Mongolia, the setting of a permanent Secretariat (three full-time MEGD staff) of the National Biosafety Committee (NBC), within the MEGD structure (Ministry of Environment and Green Development) is an interesting institutional approach that combines a higher degree of autonomy and decision-making (when compared with a ministerial department) and the advantages of being inserted within a Ministry (institutional anchorage), which is also the NCA. This is a strong point. Nevertheless, most of the national stakeholders stress the need to link Biosafety and Food Safety, particularly on issues such as imported food’s quality control and labelling, which are under different institutional umbrellas. This perspective entails a strong need of coordination and partnership of the NBC Secretariat particularly with Inspection and Customs Agencies (which is actually what the Secretariat is doing), and with the Ministry of Agriculture.

• Quite different the situation in Bhutan, where the NCA is the BAFRA (Bhutan Agriculture and Food Regulatory Authority) of the Ministry of Agriculture, a solid and dynamic institution playing a strategic role at national level, being responsible for the application of relevant national policies and legal instruments such as the Plant Quarantine Act, Seed Act, Pesticide Act, Livestock Act, Food Act, Forest and Nature Conservation Act, Biodiversity Act and, eventually, the Biosafety Act. It functions as the National Food Quality and Safety Control agency and is the National Competent Authority not only for the CPB, but also the IPPC (International Plant Protection Convention), CAC (Codex Alimentarius Commission), the WTO-SPS Agreement (World Trade Organization-Sanitary and Phytosanitary Agreement). Biosafety can therefore take profit from a robust and polyvalent institutional anchorage, which offers large guarantees of institutional and socio-political sustainability. This is a major strong point.

• Bhutan and Lao PDR (especially Bhutan) look more dynamic in searching and fostering regional cooperation (within SAARC and ASEAN umbrella, respectively) probably due to the dimension of those countries entailing a greater need of cooperation/integration and the existence of more dynamic regional associations in those regions.

• The partnership with Academic Institutions in Mongolia (the University and the national Academy of Sciences, where the GMO lab is placed) is a strong asset that is not yet fully explored in the other two countries (in Bhutan, National University is at a very early stage).

• This brief comparative analysis cannot omit mentioning the peculiarity of the Bhutan Biosafety Act of November 2014 that, in its art.20, prohibits the import, transit, intentional introduction, any use including contained use, research and development of modified organisms capable of reproducing and the socio-politically different set ups of the countries.

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30 This approach could probably also be adopted in Lao PDR, where the BEI Biosafety team could perhaps play the role of NBC Secretariat within the NCA, the Biotechnology and Ecology Institute (BEI) of the Ministry of Science and Technology.
Annex 8: UNEP Evaluation Quality Assessment

Evaluation Title:
Evaluation of the Project: National Biosafety Framework for Bhutan, Laos, Mongolia

All UNEP evaluations are subject to a quality assessment by the Evaluation Office. The quality assessment is used as a tool for providing structured feedback to the evaluation consultants.

The quality of both the draft and final evaluation report is assessed and rated against the following criteria:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>A. Quality of the Executive Summary: Does the executive summary present the main findings of the report for each evaluation criterion and a good summary of recommendations and lessons learned? (Executive Summary not required for zero draft)</td>
<td>Final report: Good summary and to the point</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>B. Project context and project description: Does the report present an up-to-date description of the socio-economic, political, institutional and environmental context of the project, including the issues that the project is trying to address, their root causes and consequences on the environment and human well-being? Are any changes since the time of project design highlighted? Is all essential information about the project clearly presented in the report (objectives, target groups, institutional arrangements, budget, changes in design since approval etc.)?</td>
<td>Draft report: Good overview, changes described and precise presentation of key points. Final report: Same as above</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>C. Strategic relevance: Does the report present a well-reasoned, complete and evidence-based assessment of strategic relevance of the intervention in terms of relevance of the project to global, regional and national environmental issues and needs, and UNEP strategies and programmes?</td>
<td>Draft report: Very good analysis based on info provided by EOU and TM Final report: Same as above</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>D. Achievement of outputs: Does the report present a well-reasoned, complete and evidence-based assessment of outputs delivered by the intervention (including their quality)?</td>
<td>Draft report: Detailed assessment Final report: Same as above</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>E. Presentation of Theory of Change: Is the Theory of Change of the intervention clearly presented? Are</td>
<td>Draft report: ToC was of good quality and discussed during the field visits</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Causal pathways logical and complete (including drivers, assumptions and key actors)?</strong></td>
<td>Final report: Same as above</td>
<td></td>
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</tbody>
</table>
| **F. Effectiveness - Attainment of project objectives and results:** Does the report present a well-reasoned, complete and evidence-based assessment of the achievement of the relevant outcomes and project objectives? | Draft report: Yes, good assessment  
Final report: Same as above |
| **G. Sustainability and replication:** Does the report present a well-reasoned and evidence-based assessment of sustainability of outcomes and replication / catalytic effects? | Draft report: Yes all dimensions considered  
Final report: Same as above |
| **H. Efficiency:** Does the report present a well-reasoned, complete and evidence-based assessment of efficiency? Does the report present any comparison with similar interventions? | Draft report: Yes, but no comparisons  
Final report: Same as above |
| **I. Factors affecting project performance:** Does the report present a well-reasoned, complete and evidence-based assessment of all factors affecting project performance? In particular, does the report include the actual project costs (total and per activity) and actual co-financing used; and an assessment of the quality of the project M&E system and its use for project management? | Draft report: Good analysis  
Final report: Same as above |
| **J. Quality of the conclusions:** Do the conclusions highlight the main strengths and weaknesses of the project, and connect those in a compelling storyline? | Draft report: Conclusions highlight key points  
Final report: Very good and relevant conclusions |
| **K. Quality and utility of the recommendations:** Are recommendations based on explicit evaluation findings? Do recommendations specify the actions necessary to correct existing conditions or improve operations (‘who?’ ‘what?’ ‘where?’ ‘when?’). Can they be implemented? | Draft report: R are targeted  
Final report: R targeted and well presented |
| **L. Quality and utility of the lessons:** Are lessons based on explicit evaluation findings? Do they suggest prescriptive action? Do they specify in which contexts they are applicable? | Draft report: Lessons are short but useful  
Final report: Same as above |

**Report structure quality criteria**

| **M. Structure and clarity of the report:** Does the report structure follow EO guidelines? Are all requested Annexes included? | Draft report: Very good structure  
Final report: Same as above |
The quality of the evaluation process is assessed at the end of the evaluation and rated against the following criteria:

<table>
<thead>
<tr>
<th>Evaluation process quality criteria</th>
<th>UNEP Evaluation Office Comments</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q. Preparation:</strong> Was the evaluation budget agreed and approved by the EO? Was inception report delivered and approved prior to commencing any travel?</td>
<td>Yes</td>
<td>6</td>
</tr>
<tr>
<td><strong>R. Timeliness:</strong> Was a TE initiated within the period of six months before or after project completion? Was an MTE initiated within a six month period prior to the project’s mid-point? Were all deadlines set in the ToR respected?</td>
<td>Yes, except for the long period necessary to obtain comments from the task manager</td>
<td>4</td>
</tr>
<tr>
<td><strong>S. Project’s support:</strong> Did the project make available all required documents? Was adequate support provided to the evaluator(s) in planning and conducting evaluation missions?</td>
<td>Yes</td>
<td>6</td>
</tr>
<tr>
<td><strong>T. Recommendations:</strong> Was an implementation plan for the evaluation recommendations prepared? Was the implementation plan adequately communicated to the project?</td>
<td>Implementation plan prepared and shared with the project</td>
<td>6</td>
</tr>
<tr>
<td><strong>U. Quality assurance:</strong> Was the evaluation peer-reviewed? Was the quality of the draft report checked by the evaluation?</td>
<td>Yes, all reports have been peer reviewed, assessment completed</td>
<td>6</td>
</tr>
</tbody>
</table>
manager and peer reviewer prior to dissemination to stakeholders for comments? Did EO complete an assessment of the quality of the final report?

| V. **Transparency:** Were the draft ToR and evaluation report circulated to all key stakeholders for comments? Was the draft evaluation report sent directly to EO? Were all comments to the draft evaluation report sent directly to the EO and did EO share all comments with the commentators? Did the evaluator(s) prepare a response to all comments? | Yes, response to comments prepared by EOU and evaluator | 6 |

| W. **Participatory approach:** Was close communication to the EO and project maintained throughout the evaluation? Were evaluation findings, lessons and recommendations adequately communicated? | Yes | 6 |

| X. **Independence:** Was the final selection of the evaluator(s) made by EO? Were possible conflicts of interest of the selected evaluator(s) appraised? | Yes | 6 |

**OVERALL PROCESS RATING** 5.75

Rating system for quality of evaluation reports
A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1
The overall quality of the evaluation report is calculated by taking the mean score of all rated quality criteria.